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UNIVERSITY OF SCRANTON

College of Arts and Sciences
School of Management
College of Health, Education, and Human Resources
Dexter Hanley College

1988/1989 Undergraduate Catalog

UNIVERSITY OF SCRANTON
UNDERGRADUATE CALENDAR
1988-89

FALL SEMESTER
1988

August 27-August 29	Freshman Orientation
August 30	Classes Begin
September 5	Labor Day—No Classes
October 12	End of First Quarter
October 17-23	Fall Break
October 24	Classes Resume
November 23	Thanksgiving Holidays Begin After Last Class
November 28	Classes Resume
December 10	Study Day
December 12-19	Semester Exams
December 19	Christmas Recess Begins After Last Exam

INTERSESSION
JANUARY 1989

January 3	Classes Begin
January 27	Final Examinations

SPRING SEMSTER
1989

February 1	Classes Begin
March 14	End of Third Quarter
March 23-April 2	Easter/Spring Break
April 3	Classes Resume
May 13	Study Day
May 15-24	Final Examinations
May 28	Commencement

SUMMER SCHOOL
1989

1st Session		2nd Session
June 5	Classes Begin	July 5
July 1	Final Examinations	August 3

University of Scranton
Scranton, PA 18510
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UNIVERSITY OF SCRANTON

UNDERGRADUATE CATALOG 1988 / 1989

Where Potential Becomes Achievement in the Jesuit Tradition

Volume 73 August 1988

University of Scranton
Scranton, Pennsylvania 18510-2192

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CAMPUS MAP	Inside Rear Cover

J.A. Panuska, S.J., Ph.D., President of the University

The University of Scranton was founded in 1888 by Bishop William O'Hara. Originally called St. Thomas College, the University received its present name in 1938 and welcomed the Jesuit fathers in 1942. After a period of unprecedented growth in both size and quality, the University now celebrates its Centennial and faces the future with pride and confidence.

Where Potential Becomes Achievement

Christopher Banks, America's Representative to the 1986 World Congress of Jesuit Alumni

The University of Scranton understands itself as a place "where potential becomes achievement in the Jesuit tradition." This statement is here elaborated in terms of the University's mission, its campus, its faculty, and its students.

STATEMENT OF MISSION

1. The University of Scranton is Catholic and Jesuit in both tradition and spirit. Committed to liberal arts education, the University has served primarily undergraduate men and women, but also serves graduate students, adult learners, and persons interested in continuing their professional education. Founded as St. Thomas College by the Bishop of Scranton in 1888, the institution moved to the administration of the Society of Jesus in 1942.

The University of Scranton's chief concerns, **as a university**, are for learning and the truth. The University aspires to encourage the kind of community for students and faculty in which learning will lead to personal growth and development. It strives to create the sort of environment in which the wisdom of past years can be preserved for the enlightenment of the future and in which the continuing search for truth can prosper. The University understands that freedom of inquiry and respect for the dignity and rights of all people must be protected for these hopes to be fulfilled.

2. **Our Catholic tradition and spirit** mean, first of all, that the University recognizes that the teaching and example of Jesus Christ are central sources of values and attitudes which should be reflected in the campus culture. Thus, Theology, as an intellectual effort to understand the data of divine revelation, is an important academic discipline at the University; and the University, although independently incorporated by the Commonwealth of Pennsylvania, stands firmly in the Roman Catholic tradition and communicates this tradition in a systematic way. It also explores other traditions, for their intrinsic merit and for the contributions they can make to a better understanding of the Catholic tradition. The University thus does not intend to serve Roman Catholics in an exclusionary sense but rather to provide Catholic education in a properly ecumenical context for students from a variety of religious backgrounds and different value orientations.

3. **Our Jesuit tradition and spirit** mean that the life of the University is inspirited with the vision contained in the Book of the Spiritual Exercises of St. Ignatius of Loyola, the founder (in 1540) of the Jesuit Order. This spirit is brought to the University not only by the Jesuits who live and work here, but, with ever increasing significance, also by their colleagues and students who may make their own this same vision through the personal experience of the Spiritual Exercises.

Translated into an educational context, this vision manifests itself in respect for the individual student as a unique person and in an emphasis on service, an open communication, on freedom of choice, on commitment to the value system contained in the Gospel of Christ. As Jesuit education grew, these characteristics manifested themselves in more measurable educational terms like clarity of thought, care for fundamentals, excellence in written and oral expression, reflection on personal experience, respect for the best in past human experiences.

4. **The University is committed to liberal arts education;** the University also affirms its emphasis on professional and pre-professional education. Though these aims may seem to be in some tension, the University believes that there is a creative relationship between laying the broad foundation that liberal arts education provides, and striving to serve the career-oriented expectation of its students and the needs of society for humanistically trained professionals.

In the Jesuit tradition, the liberal arts are defined in broad terms, comprising not only the humanities, but also science as well. (The breadth and richness of the Jesuit sense of the liberal arts is given one useful historical definition in the Society's Constitutions, Part IV, Chapter 12. See also the end of paragraph 2 of Section 3 above.) It is our goal, therefore, to provide a common foundation in the liberal arts to all of the programs of specialization in the undergraduate schools and colleges. In line with the emphasis attached to the liberal arts, attractive majors in the traditional disciplines will be provided, and special care will be taken to foster excellence of teaching and library support for these fields.

Mother Teresa receives Centennial Medal from the President.

The University's strength in professional and preprofessional programs is expressed by a good range of career-oriented majors in the College of Arts and Sciences; the School of Management; the College of Health, Education, and Human Resources; and Dexter Hanley College, as well as the Graduate School. The programs are designed to meet the standards of the appropriate professional fields, and also to develop students who have a clear sense of the ethical responsibilities which these fields demand of their successful practitioners.

5. **The University is committed to adult and non-traditional learners.** This commitment, fulfilled in the various credit and non-credit programs offered by Dexter Hanley College, is rooted in the institution's Jesuit identity as well as its historical aim of service to the local community. This aspect of the University's mission is expressed in full harmony with its goal of educational quality.

6. **The University is committed to excellent graduate education to the master's level.** This commitment, affirmed first with the creation of the Graduate School in 1950, has been reaffirmed. In the reaffirmation, the University related its graduate mission not only to its community service role, but also to its desire to promote faculty and student scholarship and research. Programs offered by the Graduate School are not only intended to serve the appropriate professional needs of the community, they are also intended to provide a balanced array of studies, reflective of the range of the University's resources in the humanities, the sciences, and the social sciences.

7. **The University serves not only the local community, but other communities as well.** The University is committed to serving students from a wide geographical region within and beyond the borders of the United States, while at the same time retaining its special commitment to the community of northeastern Pennsylvania where it has its historical roots. It intends to build its on-campus resident population while maintaining the presence of commuter students from the metropolitan area.

8. **The University is committed to academic excellence.** The pursuit of this goal touches all elements of the life of the University as outlined below. To excell is to move or to stand apart from a well-defined starting point. Our pursuit of academic excellence begins with an understanding of where we are and what we propose to do.

8.1 **Students.** We begin with a respect for the varying capacities of the students, a characteristic Ignatius of Loyola insisted upon for his schools. The University will include in its student body only those who are capable of serious academic work, but, given that initial norm, the University wants heterogeneity in its student body with respect to race, sex, religion, and socio-economic background. Moreover, the University intends to do all it can to serve the poor and to keep itself accessible to the range of socio-economic groups it has traditionally served. Excellence in the student body is measured in terms of development of academic potential, respecting in every case the unique characteristics and varying capacities of students.

8.2 **Faculty.** We begin with the acknowledgement that the quality of the University depends essentially on the quality of the faculty. We also propose to be a university that emphasizes good teaching. The University, however, takes the position that teaching is enhanced by serious scholarship and ordinarily will not last without it. Hence, excellence in the University's faculty is measured in terms of continued advancement in the quality, effectiveness, and vitality of classroom performance, as well as the continued application of faculty energy to research which advances human knowledge and may lead to publication for a scholarly audience beyond the University community. We regard teaching and research as complementary to, not in opposition to or competition with each other.

8.3 **Administration.** The starting point from which administrators advance is manifold. It presupposes credentials appropriate for leadership and management in an educational environment, experience with the special problems of that environment, and knowledge of, as well as being known in, the academic community beyond the University. Excellence is then measured along lines of improved knowledge of the University as an institution and a community, service to the constituencies of the University, availability and responsiveness to the needs of the University community, management of academic and financial affairs, effectiveness of planning, decision-making, communication of plans and decisions to the University community, and impact in the realm of ideas and influences in the metropolitan area or beyond.

9. **The University of Scranton is committed to the development of the student, including the individual's moral development.** The student is at the center of everything the University does. Our governance, instruction, and all related services, especially counseling services and academic advising, respect the uniqueness of the individual. The individual is viewed, however, as a member of a campus community and of a larger human community. The educational approach of Christian personalism regards the individual as a person-in-community. Education at the University of Scranton aims to sensitize the student to societal obligations as well as to the student's unique personal value. With total respect for an individual's freedom of choice and conscience, the University provides opportunities for worship and spiritual growth. Provision is also made for social development in a community environment. The social and intellectual dimensions of the campus community are value oriented, designed to foster in every student principled judgments and actions that are free, responsible, and humanly valid.

10. **The University of Scranton is committed,** as one of the dominant institutions in northeastern Pennsylvania, **to community service.** The primary service rendered by the University to the area is the education of future leaders for the area's professional, political, religious, cultural and business communities. The University recognizes its responsibility, within its capability, to render technical and cultural assistance to members of these communities. Accordingly, the University actively participates in the efforts to improve the region's economic and social environment. In addition, the University provides students, as students, with experience of the dominant social and economic problems of this region. It does so in order to assist them in systematic analysis of the problems of contemporary life and motivate them to contribute in some ways after graduation to the solution of these human problems.

11. **The University acknowledges that being Jesuit in tradition and spirit means being experimental and innovative.** A Jesuit university belongs at the forefront of Catholic intellectual life, interpreting the Church to the world and the world to the Church. It is in the Jesuit style to do, in education or any other work, what others cannot or choose not to do. The University therefore commits itself to the fostering of these characteristics from its well-established institutional base. The educational apostolate under Jesuit auspices is a means for promoting the greater glory of God through the lives of human persons. Accordingly, the object of education is not only the intellect but also the will, and indeed the whole human person.

12. **The Statement of Mission is intended to give direction to all that the University does.** Progress toward these ends will be measured first by the ability of each academic department and administrative unit to choose, and announce the choice of goals and specific objectives pertaining to each division of this Mission Statement. Second, progress toward our goals will be measured by the actual achievement of the stated objectives. The objectives, clearly stated, quantified, and specified within a time frame, will be means to the ends spelled out in this Statement.

THE CAMPUS

Since 1956, a development program has added 29 buildings, including eleven residence halls. Principal among these campus structures are:

ALUMNI MEMORIAL LIBRARY—Opened in 1960, a striking presentation of functional architectural planning, this bright air-conditioned building contains 225,000 volumes and subscription service to 1,600 periodicals. Microfilm, microcard and microfiche collections numbering 38,000 items, as well as a science reference room, are located here.

SAINT THOMAS HALL—Located at the foot of the University Commons, this building is named for St. Thomas Aquinas and provides a symbolic historic link between the modern University of Scranton and its predecessor, St. Thomas College. It contains classrooms, language and communication laboratories, the Computer Center, a small chapel, offices for the Registrar, Treasurer, Dean of the College of Arts and Sciences, Dean of the College of Health, Education, and Human Resources, Admissions, and Financial Aid. The HARPER-MC GINNIS WING, added in 1987, contains state-of-the-art equipment for the study of Physics and Electronics Engineering.

THE GALLERY—A multi-purpose academic building named in honor of former President Eugene Gallery, S.J., this houses Dexter Hanley College, a Media Resources Center with an audio-visual collection of more than 5,000 units, two large multi-media classrooms, the office of Career Services, the Counseling Center, a large quiet study area, and the University's art gallery.

JOHN J. LONG CENTER—Completed in 1968, and named for the former Jesuit President of the University, this three-level, multi-purpose structure has enabled the University to broaden its program of physical education. It includes a 22,820 square foot main floor area used for basketball, or convocations with a seating capacity of 4,400. It provides specialized facilities for such activities as wrestling, weight lifting, handball, tennis, and golf, as well as a physical therapy room and sauna.

LOYOLA HALL OF SCIENCE—Recently renovated and expanded, this structure houses highly specialized laboratories for the study of chemistry and biology.

O'HARA HALL—Named in honor of Frank J. O'Hara, who served the University for over half a century, this building on the corner of Jefferson and Linden Streets houses the School of Management, and the departments of Nursing, Psychology, Human Resources, and Education.

GUNSTER MEMORIAL STUDENT ACTIVITIES CENTER—Facilities include faculty and student lounges, cafeteria and snack bar, game room, and the 400-seat Eagen Auditorium used for cultural events and dramatic productions. Houses the offices of the Vice-President for

Student Affairs, Dean of Students, Campus Ministry, Student Government and Commuter Affairs.

JEFFERSON HALL—Houses both residence facilities and centers for special activities, the radio and television labs, a 300-seat auditorium, a swimming pool, and the Lawrence Mann reading room. Offices for the Departments of Physical Therapy, Communication, and Military Science are located in this building.

ROCK HALL—This structure with its ecclesiastical architecture is located above the campus in the 400 block of Monroe Avenue. It houses the University's principal chapel, Madonna della Strada, as well as the offices of Central Services and Safety and Security. It is named after the late Joseph A. Rock, S.J., professor of history and academic vice president emeritus.

WILLIAM J. BYRON RECREATION COMPLEX—Named for the Jesuit educator, formerly president of the University of Scranton and now president of the Catholic University of America, this structure was completed in 1986. It contains a large swimming pool, racquetball courts and other athletic and meeting facilities.

ELM PARK—By arrangement with the Elm Park United Methodist Church, the University now occupies two floors of its spacious parish building. This facility houses the Department of Sociology and Criminal Justice, as well as classrooms and faculty and student activities offices.

HOULIHAN-MC LEAN CENTER—Named for two eminent School of Management faculty, this former church structure contains a large auditorium and offices and practice rooms for University bands and choirs.

SMURFIT ARTS CENTER—Another former ecclesiastical structure, located at the corner of Madison and Vine, this building houses offices and studios for the University's Fine Arts Department. It is named after a generous Irish benefactor, Michael Smurfit.

THE ESTATE—Former residence of the Scranton family, and more recently of the Jesuit community, this magnificent structure now contains the offices of the University Provost, the Graduate School, and Research Services.

HILL HOUSE—Named after the Rev. William B. Hill, S.J., Professor of English and Academic Vice-President Emeritus, this faculty residence and meeting facility is located at the eastern end of the campus on the corner of Webster and Linden Streets.

UNIVERSITY COMMONS—Provides the University with a central campus environment. The Commons has a serpentine alignment with the area in front of the Gunster Memorial forming a focus for the campus. The area provides a major pedestrian link between Galvin Terrace, the University's outdoor sports center, the Gunster Memorial Student Activities Center, John Long Center, residence halls, and the heroic-sized sculpture of "Jacob and the Angel."

CHAPMAN LAKE—The University's Conference and Retreat Center at Lakeside Pines provides 8 acres of recreation space only 20 minutes drive from campus in Montdale, Pa.

RESIDENCE HALLS—Designed to function according to small-group living principles, ten residence halls, centered about terraced quadrangles, are provided. A Jesuit counsellor lives in most halls and there is a resident assistant on each floor.

To meet the increasing enrollment of resident students, the University constructed a new $4,000,000 dormitory of 200 beds. Opened in September 1985, this dormitory is named Redington Hall to honor a generous benefactor, Francis E. Redington. The University also has recently acquired a series of houses and apartment buildings in the vicinity of campus and converted these to various types of student apartment complexes. Some of these are organized about academic interests and most feature optional kitchen arrangements. Finally, students in the upper

classes are permitted to live off campus in non-university owned apartments.

The standard plan for resident students includes living quarters, three meals on each class day, and brunch and dinner on weekends and mid-week holidays. The plan includes nursing service for emergency and short-term care in the infirmary. Further information is given in the section of the Bulletin which deals with expenses.

CAMPION HALL—Named for Edmund Campion, 16th Century Jesuit scholar and martyr, this residence was built by the Society of Jesus in 1987 for its members who serve the University.

HYLAND HALL—Completed for Fall 1988, this new classroom building at the corner of Linden and Jefferson honors Kathryn and Bernard Hyland, parents of University alumnus and benefactor Bernard V. Hyland, M.D. This facility also houses the University bookstore.

A FACULTY OF TEACHERS AND SCHOLARS

Over 200 faculty and administrators participate in the University's educational enterprise. They hold degrees from 135 different universities in 30 countries on five continents. Cambridge and the University of London in England; Louvain and the Gregorian on the Continent; the University of Calcutta in India, the Sophia University in Japan, Soochow University in China; Berkeley, Princeton, Yale, MIT, Notre Dame and Georgetown in America—all are represented among the faculty.

Richard Rousseau, S.J., S.T.D., Ph.D., Editor, University of Scranton Press

By its nature and function, a university faculty consitutes the most cosmopolitan element in a community. Hindu and Muslim, Christian and Jew, ministers and rabbis—scholars and teachers all—are found on the University's faculty.

The Jesuit tradition is carried on at the University not only by the 25 Jesuits engaged in teaching or administration, but by the fact that almost half of the faculty hold at least one degree from a Jesuit college or university.

As indicated in the Statement of Mission, excellent teaching and scholarship are regarded as complementary at this institution. Evidence of the latter is seen in the fact that numerous faculty serve on editorial boards of national and international journals, and two serve as principal editors—Prof. David Friedrichs, *Legal Studies Forum;* and Dr. John Norcross, *Journal of Integrative and Eclectic Psychotherapy.* Further, Fr. Richard Rousseau, S.J., is founding editor of Ridge Row Press, which in 1988 expanded to become the University of Scranton Press and which specializes in philosophical and theological publications.

The Directory at the conclusion of this Bulletin presents more detailed information about the faculty.

STUDENT DIVERSITY AND PARTICIPATION

As the faculty come from around the world, so do our students. Twenty-four states and 15 foreign countries are represented in the University's student body of 4700. In turn, through

the Fulbright and Year Abroad programs, University of Scranton students matriculate at such foreign universities at Louvain, Madrid, Tubingen, Mainz, Oslo, Fribourg, Cologne, Berne, Strasbourg, the Sorbonne, and University College, Dublin. This interchange of students contributes to the diversity and intellectual life of the University.

Much of the work in this university community is accomplished through student input. Considerable scientific research at the University is done by undergraduate students in the laboratories and in the field. The University newspaper and yearbook are edited and managed by students. With faculty assistance, students publish articles and abstracts in national scholarly journals. Students work in the public relations and admissions offices, computer center, as resident assistants in the dormitories, as research assistants and interns for deans and registrars.

Similarly, they participate in the University's decision making. Seven students are elected by the student body to serve on the University Senate. Others serve with departmental chairpersons and faculty on the Conferences which recommend to the Deans changes in academic programs. Students also serve with other members of the University community on the various Search Committees which recommend candidates for the principal administrative posts from President to Dean.

INDICES OF ACHIEVEMENT

Working with dedicated faculty and staff to maximize their potential, students at the University of Scranton become achievers. Among over 20,000 alumni the following might in particular be mentioned:

Patrick Cardinal O'Boyle ('16), Archbishop of Washington; Michael J. Eagen, Sr. ('27), Chief Justice of the Pennsylvania Supreme Court; Dr. Clarence Walton ('37), first lay president of the Catholic University of America; Dr. Glynn Lunney ('55), Chief of the Flight Director's Office for the National Aeronautics and Space Administration, lead flight director for historic moon flights of Apollo 11 through 15; Jason Miller ('61), winner of the 1973 Pulitizer Prize in Drama for *That Championship Season* and "Oscar" nominee for his role in *The Exorcist;* Paul Montrone ('62), president and managing director of the Henley Group, Inc., a Fortune 500 Company; and Dr. Francis J. Castellino ('64), Dean of the College of Science, University of Notre Dame.

BACCALAUREATE SOURCE OF PhD's

Achievement is also recognized in a recent study of the office of institutional research at Franklin and Marshall College which shows that over a 60 year period (1920-80), the University of Scranton ranked 91st out of 867 four-year, private, primarily undergraduate institutions as the baccalaureate source of PhD's in all fields. This report was followed up in a study of Prof. Alfred E. Hall, College of Wooster (*Change* Magazine, April 1984), which analyzed the same data but took into account the relative size of the institutions as measured by number in graduating classes. The Wooster study resulted in the University of Scranton ranking 80th out of 867 colleges in terms of the percentage of graduating seniors between 1920 and 1980 who went on to earn a Ph.D.

MEDICINE AND LAW

The similarly excellent record of Scranton alumni in gaining acceptance to professional schools—including the nation's most prestigious—is documented in the Pre-Medical and Pre-Law sections later in this catalog.

TRUMAN AND OTHER NATIONAL SCHOLARSHIPS

In recent years students from the University have won a number of highly competitive national fellowships, including those offered by the Mellon Foundation, the Danforth Foundation, the National Science Foundation, and the Harry S. Truman Memorial Foundation. Most remarkably, two sisters, Maria Mascaro (1984) and Carla Mascaro (1987), both were awarded four-year Truman scholarships. In 1988 Alice Batt, a double major in English and Philosophy, won a summer study grant through the National Endowment for the Humanities.

INTERNATIONAL FELLOWSHIPS: FULBRIGHT AND ROTARY

Achievement is recognized too in the number of prestigious international fellowships awarded to graduates in recent years. In the last 17 years, 60 students have been awarded fellowships in the competitions administered by the Institute of International Education and International Rotary.

Seven University of Scranton students held fellowships awarded through the Institute of International Education and the Rotary Foundation in 1986-87. Robert Rabecs, a triple major in political science, philosophy and history, won a Fulbright to the Philippines; James (Todd) Lavelle, a double major in biology and history, was awarded a Fulbright to Thailand; Christopher Montone, a double major in international studies and Spanish, won a Fulbright to Honduras; Roy Whitman, an international studies major, was awarded a Swiss University grant to Fribourg; all four were graduates of the College of Arts and Sciences. Two students enrolled in the School of Management were also Fulbright recipients: Margaret Husosky, an economics/finance major, studied at Auckland University in New Zealand; and DeLoris Spegar, a finance/business major, was the first University student to receive a Fulbright to Singapore. Finally, Janet Schubert, a foreign languages major in the College of Arts and Sciences, won a Rotary fellowship to the Academie Royale des Beaux—Arts de Bruxelles in Belgium.

Four University of Scranton students held fellowships awarded through the Institute of International Education and the Rotary Foundation in 1987-88. Susan Anne Conway, a double major in modern languages and economics/finance, won a Fulbright to Germany; Margaret M. Keen, a modern languages major, was awarded a French Government Teaching Assistantship to France; and Kevin Michael Wright, a double major in accounting and philosophy, won a Fulbright to Finland. Finally, Kathleen Mary Gallagher, a double major in psychology and philosophy, received a Rotary International Fellowship to Nepal.

In 1988-89, four University students again hold Fulbright Fellowships awarded through the Institute of International Education. Michel Aboutanos, a double major in biology and French, holds a Swiss University fellowship to the University of Fribourg; Christine O'Brien, a double major in biology and philosophy, is on a Fulbright to Kenya; Mary Fan-Mei Yuen has been awarded a Fulbright to Singapore; all three are graduates of the College of Arts and Sciences. Jeffrey Gabello, a double major in accounting and German from the School of Management, won a Fulbright to Germany.

A full list of the University's international fellowship winners follows on the succeeding pages.

In recognition of Senator J. William Fulbright's contribution to the Fulbright Fellowship program, the University of Scranton on May 29, 1983 awarded him an honorary degree.

Dr. John Q. Feller of the History/Political Science department is the University's Fulbright Advisor.

Michel Aboutanos
Switzerland

Christine O'Brien
Kenya

Mary Yuen
Singapore

Jeffrey Gabello
Germany

Senator J. William Fulbright

AWARDS FROM INSTITUTE OF INTERNATIONAL EDUCATION
FULBRIGHT PROGRAM AND INTERNATIONAL ROTARY, 1972-1988

1972	Gerald Mulderig	Germany
	John Rock, S.J.	Germany
1973	Gerard Dougher	France
1974	Basil Malish	Portugal
	George McCool	France
	Kevin Wilson	Rumania
1975	John Ausura	Germany
1976	Grace Hosie	Germany
	Laurence Orzell	Poland
1977	Thomas Bonhage	Germany
1978	Paula Dzwonczyk Betancourt	Germany
	Philip Horner	Switzerland
1979	Mark Bender	Rumania
	Louis Furiosi	France
	Dennis Hagemann	Germany
	Christine Piatek	Poland

1980	Veronica Cardiff	Germany
	Stephen Carlin	Chile
	Michael Corbley	Switzerland
	Maryann L. Heckman	Uruguay
	Helen Hricko Haney	Germany
1981	Patrick Cumberland	Uruguay
	Arlene Drack (ITT)	Norway
	Deborah Krzywiec	Germany
	Irene Mlodzinski	Switzerland
	Mark Wisniewski	Switzerland
	Brian Wynne	Germany
1982	Michael Knodracki	Peru
	Bernadine Brennan-Moglia (ITT)	Finland
	Kathleen Flanagan	Belgium
	Joseph Piccirilli	Germany
	Howard Sorensen	Uruguay
	Elizabeth Veca	Switzerland
	Leon Xavier Zawacki	Germany
1983	Erin Brennan	Germany
	Patrick Davies (ITT)	Chile
	Peter Regeski	France
	Joseph Tuncavage	Switzerland
	Christopher Wahren	Germany
1984	Robert Conforti	Switzerland
	Kathleen Flanagan	France
	Colette Mazzucelli	Switzerland
1985	John Beltrami	Switzerland
	Michele Gieger	Germany
	Marguerite Pedley	New Zealand
	Louise Vogel	Germany
1986	Margaret Husosky	New Zealand
	James Lavelle	Thailand
	Christopher Montone	Honduras
	Robert Rabecs	Philippines
	Janet Schubert	Belgium
	DeLoris Spegar	Singapore
	Roy Whitman	Switzerland
	Ann Marie Laskiewicz	South Africa
1987	Susan Conway	Germany
	Kathleen Gallagher	Nepal
	Margaret Keen	France
	Kevin Wright	Finland
1988	Michel Aboutanos	Switzerland
	Jeffrey Gabello	Germany
	Christine O'Brien	Kenya
	Mary Yuen	Singapore

RECENT INTERNATIONAL FELLOWSHIP WINNERS

Kevin Wright (1987)
Finland

Janet Schubert (1986)
Belgium

John Beltrami (1985)
Switzerland

Margaret Keen (1987)
France

Robert Rabecs (1986)
Philippines

Marguerite Pedley (1985)
New Zealand

Michelle Gieger (1985)
Germany

Christopher Montone (1986)
Honduras

Kathleen Gallagher (1987)
Nepal

Academic Program

The University's academic program for undergraduates is offered through three day schools, the College of Arts and Sciences, the School of Management, and the College of Health, Education, and Human Resources; and through its evening division, Dexter Hanley College. The schools share a common General Education program and offer baccalaureate degrees in 46 fields.

DEGREE PROGRAMS

The University offers the following degree programs for the undergraduate student:

BACHELOR OF ARTS

Classical Languages
Communication
Communications/ English*
English
French
German
History
Interdisciplinary Studies
International Language-Business
Philosophy
Spanish
Theology and Religious Studies

BACHELOR OF SCIENCE

Accounting
Biochemistry
Biology
Biophysics
Chemistry
Chemistry-Business
Chemistry-Computers
Child and Family Studies
Computer Science
Criminal Justice
Elementary Education
Finance
Electronics Engineering
Electronics-Business
Gerontology
Health and Human Services
Health Administration
Information Systems
International Studies
Liberal Studies*
Management
Marketing
Mathematics
Medical Technology
Nursing
Physical Therapy
Physics
Political Science
Production and Operations Management
Psychobiology
Psychology
Public Administration and Public Affairs
Secondary Education
Sociology

ASSOCIATE IN ARTS*
ASSOCIATE IN SCIENCE*

Business
Criminal Justice
Electronics Engineering
Health/Human Services
Information Systems
Political Science
Public Administration
Social Relations/Gerontology

THE SCRANTON PLAN

The product of a two-year study by a faculty-student-administration committee, the Scranton Plan seeks traditional Jesuit university educational objectives in the era of the knowledge explosion. In departing from a core curriculum of specifically required subjects, it acknowledges that there are today many more requirements for a liberally educated person than was formerly the case: disciplines, especially in the natural and social sciences, not known a century ago; foreign cultures thought insignificant only fifty years ago.

The University's General Education Curriculum, in seeking to equip undergraduates with the ability to communicate their knowledge effectively, takes note that there are today many more ways to communicate than in the past. Computer and other quantitative languages, applied fine arts as aesthetic languages, writing and oral communication laboratories may develop the ability to communicate with others and carry on the University's traditional emphasis on rhetoric as cogently as the study of Latin and Greek in the past, or even of modern foreign languages in today's world of intensified international relations. Different students will have different communication interests and it is a virtue of the Scranton curriculum that its flexibility can accommodate and utilize that interest.

Finally, the Scranton Plan takes note that students have criticized the absence of a study of values on American university campuses, the failure of the universities to deal with philosophies of life which provide the means to evaluate the norms of national and personal actions. The Scranton curriculum provides a significant place for the study of philosophy, the theological tradition

*Available through Dexter Hanley College only.

of the student, and comparative religions. This too continues a traditional emphasis in the University's educational pattern but allows the student flexibility in choosing to meet third and fourth year general education requirements through either theology or philosophy, in opening up more opportunities for the study of human values through related courses in psychology, sociology, enviromental sciences, etc., and in making it more feasible to carry a double major in theology or philosophy along with the student's primary major.

CURRICULAR OUTLINE

Major Field of Concentration ..... 36 credits
Cognates Related to Major ..... 24 credits
General Education ..... 67 credits

Major: 36 credits in the major field of concentration is the normal amount. Some departments require less, the minimum being 30 hours with the unallocated credits going into the other curricular areas. Several departments, especially in the physical science area, require more than 36 hours, the additional credits coming from the cognate area and/or as overloads beyond the normal 127 credits needed for graduation. The specific departmental curricular models on subsequent pages of the Bulletin should be consulted. Students desiring to shape an **interdisciplinary major** should consult their Academic Dean on their program.

Cognate: These are courses external to the major field of concentration, but which round out the student's competence in his other major through the study of related disciplines and subject matter, or through the acquisition of skills useful to his or her specific vocational goals. Normally the cognate area will consist of 24 credit hours, some of which may be specified by the department and others chosen by the student according to his or her particular interests or objectives.

General Education: Shunning a merely technical or pre-professional education, the majority (67) of the student's 127 credits toward the degree are devoted to a broad liberal education according to the following typical pattern.

A. **Physical Education**—Four one-credit courses
in the freshman and sophomore years ..... 4 credits
B. **Distribution of remaining credits into broad areas**
of knowledge as indicated in the table ..... 63 credits

In some instances, departmental recommendations are made with respect to the general education courses; departmental curricular models should be consulted. In fulfilling the distribution requirement, students ought ordinarily to complete at least five two-course sequences to provide depth as well as breadth in their general education.

C. **Communication Skills**—Unlike many college curricula, the Scranton curriculum does not require specific courses in English grammar. Rather, because of its recognition that writing and speaking effectively are skills necessary for success in college and in one's later professional life, the University of Scranton requires that students demonstrate basic competencies in written and oral communication before their junior year. Each of these competencies may be demonstrated by the students in one of the following ways:

1. An examination supervised by Communication Center faculty.
2. Successful completion (a grade of C or higher) of courses set up to facilitate mastery of these skills: Communication 2 for oral communication; English 7 (or appropriate AP course) for writing skills.

D. **Non-Classroom Activities**—With the approval of the Academic Dean and the department, the student is encouraged to petition beforehand that certain non-classroom activities such as travel abroad, internships, participation in artistic productions, sustained activity in political,

social, or religious organizations, etc. be supervised, evaluated, and accepted for academic credit—normally in the Free Area of the General Education distribution.

DOUBLE MAJOR PROGRAM

Students at the end of the first semester of freshman year or thereafter may elect to pursue a second field of concentration in addition to their first major. The permission of the appropriate Dean and the agreement of the two pertinent departmental chairpersons should be obtained in writing at this time and placed in the student's file. The student is responsible for all major and required cognate courses. The 67 credits in the General Education area need not, of course, be repeated. The Registrar's office will add the notation of the second major to the student's transcript in the first month of the student's senior year by which time he/she should have registered for all the courses required in the double major program. Seventy students in the class of '88 graduated with double majors.

SECOND DEGREES

Students who already hold the Bachelor's degree from an accredited college may pursue a second baccalaureate, provided that the University's general education requirements are met and that at least sixty credits toward a degree in a new field are obtained at the University. Applications should be made through Dexter Hanley College.

MINORS

Minors, which require a minimum of 15 hours, are currently available in the following fields: Biology, Business, Chemistry, Biochemistry, Communication, Computer Science, Information Systems, Criminal Justice, English, Foreign Language, Gerontology, History, Health and Human Services, Health and Human Services Administration, Mathematics, Philosophy, Political Science, Public Administration, International Studies, Psychology, Sociology, and Theology. Consult departmental listings for details.

Dr. Mary Engel, Associate Dean, College of Arts and Sciences; Director, Academic Advising Center

DISTRIBUTION TABLE

General Education Areas	MAJOR FIELDS *Nat. Sci.‡ Math Psych. Comp. Sci. Nursing‡ Physical Therapy‡*	*Human Services Sociology† Pol. Science Criminal Justice*	*English History Modern Language*	*Philosophy Theology*	*Communication*	*Accounting Finance Management Marketing Production & Operations Mgt.*
	a	*b*	*c*	*d*	*e*	*f*
I. Natural Science & Quantitative Studies (Natural Sciences, Math., Psychology*, Adv. Computer Sci., Statistics)	—	9	9	9	9	12
II. Social and Behavioral Sciences (Sociology, Economics, Pol. Sci., Geog., Psychology*, M.S. 101, Education)	12	—	12	12	6	6
III. Communications (Speech, Writing, Elementary and Intermediate Languages,** Applied Fine Arts, CMPS 20, 21, 24, 25; see also page 58.)	9	9	9	9	—	9
IV. Humanities (History, English and Foreign Literature, Advanced Language,** Art History, Music)	18	18	6	18	18	18
*V. Philosophy and Theology****	*6*	*6*	*6*	*6*	*6*	*6*
Philosophy	(6)	(6)	(6)	(6)	(6)	(6)
Theo./Religious Studies	6	6	6	6	6	6
Free Area	*6*	*9*	*9*	*9*	*12*	*3*

CREDITS

‡ Specific reductions in General Education hours are allowed in certain natural science and health professional fields.

† Sociology allows 12 credits in Free Area.

* Psychology 24, 142, 143, 146 and 147 are Area I; all others are Area II.

** If a student has completed AREA III, as many as two elementary language courses and two intermediate language courses (all in the same language) may be used in AREA IV.

*** Area V requires 6 credits in Theology (T/RS 21-22), 6 credits in Philosophy (Phil. 20 and Phil. 110), and 6 more in either field.

FRESHMAN OPTION: GENERAL AREA STUDIES

Students not yet ready to declare a major have the option of selecting one of four General Areas of study (Humanities, Natural Science, Social Science, Business), with the particular major to be determined in consultation with the appropriate Dean's office by the end of freshman year. Curriculum outlines for the General Areas are indicated below. Students in the General Areas of Study will participate in a Freshman Year advising seminar.

General Area: Humanities*

			Fall	Spring
MAJOR/ COGNATE	Two sequences from Hist 1-2, Hist. 3-4, Engl. 11-101, Comm. 102-103, Lang. 23-24 or 101-102		6	6
GE AREA I	Nat. Sci./Quant.	Elective	0-4	0-4
GE AREA II	Social/Behavior	Electives	3	3
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 20 or T/RS 21	Intro. to Phil. or Theo.	0-3	0-3
PHYS EDUC	Phys. Ed.	Phys. Ed.	1	1
		Total	16/17	16/17

General Area: Natural Science*

MAJOR/ COGNATE	Two or three sequences from Biol. 1-2, Chem. 11-12, Phys. 11-12, Math 13-14 (or 14-21) Cmps 24-25**		8½-13	8½-13
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities**	Electives	0-3	0-3
GE AREA V	Phil. 20 or T/RS 21	Intro. to Phil. or Theo.		3
PHYS EDUC	Phys. Ed.	Phys. Ed.	1	1
		Total	15½/17	15½/17

General Area: Social Science*

MAJOR/ COGNATE	Two sequences from Psych 23-Elective, Soc. 21-22, Soc. 21-Gero. 101, Pol. Sci. 5-6, Pol. Sci. 11-12, H/HS 11-12, Soc. 21-CJ 20		6	6
GE AREA I	Nat. Sci./Quant.	Elective	0-4	0-4
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20 or T/RS 21	Intro. to Phil. or Theo	0-3	0-3
PHYS EDUC	Phys. Ed.	Phys. Ed.	1	1
		Total	16/17	16/17

General Area: Business

MAJOR/	Econ. 11-12	Principles of Economics I-II	3	3
GE AREA I	Math	Math Option	3/4	3/4
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20-T/RS 21	Intro. to Phil.-Theo.	3	3
PHYS EDUC	Phys. Ed.	Phys. Ed.	1	1
		Total	16/17	16/17

*Students in General Areas of Humanities, Natural Science, and Social Science will select courses in consultation with Dr. Mary Engel, Associate Dean of CAS, and the Academic Advising Center.

**Natural Science students who select only two MAJOR/COGNATE sequences will take two Humanities courses in place of a third sequence. Students who select Phys. 11-12 must also take Math 14-21.

ACADEMIC REGULATIONS

DEGREE REQUIREMENTS

In order to earn a bachelor's degree from the University of Scranton the student must complete all the courses prescribed in the curriculum table of the major. No student will be eligible for graduation who has not removed all failures in required courses or who has not earned the necessary minimum 2.0 (C average) Quality Point Index.

Receipt of the degree is not automatic. Seniors expecting to graduate in the spring should make formal application to the Registrar's office by February 15.

GRADING SYSTEM

Grade reports are mailed to all students at the end of each semester and these become part of the official record of the student. Freshmen receive mid-semester grades to inform them of their progress. Upperclass students receive notice at the quarter if they are "deficient" and in danger of failing the course at that time.

A, A-	Excellent (outstanding and/or original work)
B+, B, B-	Good
C+, C	Satisfactory
D+, D	Passing but well below average
F	Failure (below minimum acceptable standards)
W	Withdrew officially; deadline is one month before the end of the semester.
I	Incomplete must be removed by mid-term of following semester.
S, P	Satisfactory, Pass—not figured in Quality Point Index
U	Unsatisfactory
Audit	Course not taken for credit. (Change to Audit can be made only by passing students and before end of first half of semester.)

UNSATISFACTORY: Equivalent to failure.

INCOMPLETE: If a course has not been completed because of illness or some other serious reason, an Incomplete may be given. To remove this grade the student must satisfy all course requirements by the mid-term of the following semester. Any course not completed by this time will result in a grade of F.

REPEAT OF COURSE: Special permission is not needed to repeat failed courses; however, prior approval of the Dean is needed to repeat non-failed courses.

CHANGE OF GRADE: A student who believes the grade received for a course is unreasonable should first appeal the matter to the professor, whose decision is normally final. The student has the right, however, to appeal to the faculty member's chairperson, who will make a recommendation in writing to his or her Dean. The student may request the Dean to review the matter. The decision of the Dean is final. Ordinarily, no grade change will be considered unless it has been raised to the level of the Dean's office within one month from the time the original grade was submitted to the Registrar's office.

QUALITY POINT INDEX

A standard used in judging a student's performance is the Quality Point Index (QPI) determined as follows:

Each semester hour of credit with a grade of A is valued at 4 quality points: A- at 3.67 quality points; B+ at 3.33; B at 3.0; B- at 2.67; C+ at 2.33; C at 2.0; D+ at 1.5; D at 1.0. An F yields no quality points. Thus, for example, a three-credit course with the grade A yields 12 quality points; a B yields 9; a C yields 6.

The Quality Point Index (or Quality Point Average) commonly abbreviated QPI (or QPA) is computed by dividing the total number of Quality Points earned by the total number of credits attempted. For example, 15 credit hours, all at C grade, would earn 30 Quality Points or a 2.0 QPI (30/15).

The total number of credit hours attempted include those courses with final grade F as well as A, B, etc. Notice this Quality Point Index applies only to courses taken at the University of Scranton and is not affected by credits transferred from other colleges.

A Quality Point Index listing is made at the end of each semester. On the basis of his or her cumulative Point Index, a student's rank in class and eligibility for honors at graduation are determined.

GRADUATION HONORS

To be eligible for graduation and for honors at commencement, a student must have completed a minimum of 63 credit hours of work at the University of Scranton.

Summa cum laude ..... 3.85 Quality Point Index in all subjects
magna cum laude ..... 3.65 Quality Point Index in all subjects
cum laude ..... 3.50 Quality Point Index in all subjects

DEAN'S LIST

To be eligible for the Dean's List, a day school student must complete a full program (12 credits minimum; Pass-Fail courses are not included in meeting this minimum). Those students whose QPI for the given semester ranks them in the top 20% of their class are named to the Dean's List for that semester. (A Dexter Hanley College student will merit the Dean's List by achieving a QPI of 3.3 for 9 credits.) Names of those on the Dean's List are published each semester and transcripted.

PROBATION AND DISMISSAL

One semester of probation is granted to students whose QPI falls below 2.0, or who otherwise are in danger of dismissal. Students who receive an F while on probation are subject to dismissal, as is any student who incurs 2 F's in one semester, or who has accumulated three F's which have not been successfully retaken. Probationary status may be removed through adequate achievement in summer school or January intersession at the University of Scranton.

Students on Academic Probation are allowed to take no more than 14 credits during the fall or spring semesters without explicit written approval of the appropriate Dean. Students on probation are ineligible to participate in any co-curricular activities, with the exception of departmental clubs with an academic orientation. Intercollegiate athletics, dramatic and theatrical productions, debate, and Student Government are prohibited.

It is University policy in the case of a student dismissed from another institution or a college of the University itself that this student will not be allowed to register for courses in any of the colleges of the University in the semester following dismissal.

PASS-FAIL OPTION

Students whose QPI is 2.67 or better may elect to take some courses on a pass-fail basis. Student choosing the pass-fail grading option for a course must file the appropriate form in the Registrar's office by the end of the second week of the semester. Courses in a student's major, minor, or cognate MAY NOT be taken on a pass-fail basis. Students may not take more than one academic course at a time on a pass-fail basis; nor more than one course per year, on average (other than internships, practica, or physical education courses), during their degree programs.

READER COURSES (INDIVIDUAL STUDY)

The primary purpose of a reader course is to enable a student to pursue a course of study not otherwise offered during the term the reader is taken. Readers may NOT ordinarily be used to fulfill general education requirements. Students may take no more than one reader per term, nor more than one reader per year, on average, during the course of their degree programs. Readers are to be taken for the same number of credits as are granted similar courses in the discipline in which the reader is offered. Readers may not ordinarily be used to repeat failed courses.

LATE REGISTRATION

In courses following a standard schedule (three 50 minute periods per week), no new student may be admitted after 4 class hours. Interpretation of the late registration policy for courses following non-standard schedules must be rendered by the appropriate Dean.

ABSENCE FROM CLASS

Freshmen are limited by University regulation to twice as many absences as credits are given for a particular course. Thus six cuts are allowed freshmen in most courses. Upperclassmen have unlimited absences unless the particular professor or the department promulgates in writing some other policy. In any event, students miss class at their own risk.

Students who exceed the cut policy are subject to a failing grade in the course. All absences, for whatever reasons, are covered by the above regulations.

WITHDRAWAL FROM A COURSE

A student wishing to withdraw from a course should first discuss the matter with the instructor. Withdrawal always entails financial loss. If the student believes withdrawal necessary, he or she should obtain the form for this at the Registrar's Office, have it signed by the instructor and by the appropriate Dean and then return the form to the Registrar's Office. Any tuition credit is based on the date on which the completed form is returned to the Registrar's Office. (See the Schedule of Refunds.) Failure to officially withdraw from a course may result in a failing grade for the course. The absolute deadline for withdrawing from a course is one month before the last class day of the semester.

WITHDRAWAL FROM THE UNIVERSITY

Students desiring to withdraw from the University should discuss the matter with the appropriate Dean. The student should also discuss the question with his or her advisor. The form

for withdrawal can be obtained in the Registrar's Office. It must be signed by all of the student's instructors, by the Counseling Center and by the Dean. Similarly, the Dean of Students initials the form to indicate that the student has returned his or her ID card, and the Library and Treasurer's Office initial the form to indicate that the student's financial accounts with the University are settled. Any tuition refund is based on the date on which the completed form is returned to the Registrar's Office.

SUMMER SCHOOL

The University of Scranton annually offers a Summer School of two sessions to allow students to accelerate their degree programs or to make up courses that may not have been completed during the regular semesters.

University of Scranton students who have completed their sophomore year (60 credits) are permitted with the prior written permission of the appropriate Dean to attend Summer sessions of other four-year colleges or universities; on the same basis, those who have not completed sophomore year are permitted to take courses at accredited four or two-year institutions. Grades below C received elsewhere are not transferrable to the University of Scranton; no grades from other institutions are computed into the student's quality point index.

GENERAL REGULATIONS

Ordinarily, all entering students—both freshmen and transfer students—are held to the requirements in the catalog of the year in which they enter.

The University reserves the right to modify admission requirements at any time; the right to cancel any course without prior notice to the students; change the arrangement of courses, the requirements for graduation, degrees, tuition, fees and other regulations affecting the student body.

The University reserves the right to take appropriate disciplinary action in the case of any student who conducts himself or herself contrary to the standards of the University. These standards (particularly in the area of Academic Integrity), are given clear expression in the Faculty and Student Handbooks of the University.

Ellen McGuire, Assistant to the Dean, College of Health, Education, and Human Resources.

Aileen Boyle, Assistant Dean, College of Arts and Sciences.

HONOR SOCIETIES

Those National Honor Societies which are represented in the University of Scranton are listed below in order of the foundation of the local chapters. An asterisk (*) after the name indicates that this National Honor Society is a member of the Association of College Honor Societies.

ALPHA SIGMA NU*

The National Jesuit Honor Society founded in 1915 with chapters in 28 Jesuit universities throughout the United States. The Scranton chapter was founded in 1943, the oldest Honor Society in the University. It is the only Honor Society open to students and faculty in all disciplines and all colleges of the University. Its admission standards are the most rigorous. The Greek letters signify *adelphotes skolastikon nikephoron*—brotherhood of honor students. Juniors and Seniors who have distinguished themselves in scholarship, loyalty and service are eligible for membership. Appointment is made by the President of the University on the recommendation of the moderator and nomination by chapter members of the Society. From 1982-1985, Dr. William Parente, former Dean of the College of Arts and Sciences, served as national president of the 20,000 member organization.

The Society annually presents the Alpha Sigma Nu University award for teaching. The recipients of the Award:

1969 Prof. Lawrence Mann†
1970 Prof. Frank Brown†
1971 Prof. Thomas Garrett
1972 Prof. Michael DeMichele
1973 Prof. Bernard Williams
1974 Rev. Bernard Suppe, S.J.
1975 Rev. Edward Gannon, S.J.†
1976 Prof. Robert A. Sallavanti
1977 Prof. John P. McLean
1978 Prof. Charles J. Thoman
1979 Prof. Urban von Wahlde
1980 Prof. J. Brian Benestad
1981 Atty. John J. McGee
1982 Prof. Harold Baillie
1983 Prof. E. Springs Steele
1984 Prof. John Earl
1985 Prof. Michael C. Cann
1986 Prof. Joseph T. Evans
1987 Prof. Richard Klonoski
1988 Rev. Ronald H. McKinney, S.J.

Rev. Ronald H. McKinney, S.J.
Assistant Professor of Philosophy
1988 Winner of Alpha Sigma Nu
University Award for Teaching

PHI ALPHA THETA*

International Honor Society in History. Basic requirements: 12 credits in History; Quality Point Index—General 3.0, 3.1 in History. The mu rho chapter was established at the University in 1967.

DELTA MU DELTA*

National Honor Society in Business founded in 1913. Basic requirements: a Quality Point Index of 3.35 with a major in Business or Accounting. The local omega chapter was established in 1968-69.

SIGMA PI SIGMA*

National Honor Society in Physics for undergraduate and graduate students founded in 1921. Its chapters are restricted to colleges and universities of recognized standing which offer a strong physics major. The local chapter was founded in February 1969.

OMICRON DELTA EPSILON*

National Honor Society in Economics. Basic requirements: 12 credit hours in Economics with a General QPI of 3.2 and a 3.0 average in Economics. The local xi chapter of Pennsylvania was founded in May 1969.

PSI CHI*

National Honor Society in Psychology, founded in 1931. This organization has established chapters in 628 colleges and universities in all 50 states. The local chapter was installed in May 1969.

PHI DELTA KAPPA

International professional fraternity for men and women in education. Membership is limited to graduate students and teachers. Local chapter founded in 1970.

PI GAMMA MU*

International Honor Society in Social Science. Founded in 1924 to improve scholarship in the social sciences and to encourage inter-disciplinary study. Basic requirements: 20 credit hours in social science; Quality Point Index of 3.0. The local alpha epsilon chapter was founded in February 1971. It presents annually the Frank C. Brown Scholarship Medal and the Alpha Epsilon Delta Outstanding Citizen Award.

ALPHA SIGMA LAMBDA

National Honor Society to encourage scholarship and leadership among adult students in continuing higher education. The alpha upsilon chapter was installed here in 1972.

ETA SIGMA PHI

National Honor Society for students of Classical Languages. The Scranton epsilon gamma chapter was founded in November 1972.

PI MU EPSILON

National Honor Society for Mathematics Majors in Junior or Senior year with a general Quality Point Index of 3.0 and a 3.0 average in Mathematics. The local Pennsylvania mu chapter was installed in February 1973.

ALPHA MU GAMMA

National Honor Society for students of Foreign Languages. Founded in 1931. The Greek letters signify *amphi mouse glosson:* for the muse of languages. The Scranton chapter of theta iota was installed in May 1973.

DELTA SIGMA RHO-TAU KAPPA ALPHA*

National Honor Society in Forensics. Founded in 1963 through merger of societies founded in 1906 and 1908 respectively. The local chapter began in 1975.

DELTA TAU KAPPA

International Social Science Honor Society founded in 1961 is dedicated to high scholastic achievement. The Pennsylvania beta chapter was installed at the University of Scranton in October 1975. Requirement: QPI of 3.5 and 20 credits in social science.

PHI LAMBDA UPSILON

National Honorary Chemical Society established in 1899. The Scranton beta kappa chapter, one of 60 chapters nationwide, was installed in October 1975. For students with 24 credits in chemistry and a 3.0 QPI.

ALPHA EPSILON DELTA*

The National Premedical Honor Society founded in 1926. The Pennsylvania iota chapter was installed at the University in May 1976.

THETA ALPHA KAPPA

National Honor Society in Theology and Religious Studies founded in 1976 at Manhattan College. The University of Scranton alpha nu chapter was installed on April 4, 1980. Twelve credits in theology with a 3.5 QPI are needed for membership.

SIGMA TAU DELTA*

National Honor Society in English founded in 1924, this organization is for students who major or minor in English and rank in the top 35 percent of the class. The local mu omicron chapter first met on April 30, 1980.

ALPHA EPSILON ALPHA

An honor society founded April 30, 1980 at the University of Scranton to recognize scholarship in the general field of communications. For communication majors with a 3.3 QPI.

ALPHA KAPPA DELTA*

International Honor Society for sociology students founded in 1920. Requirements include 18 credits in sociology with a QPI of 3.0 overall and in sociology. The Pennsylvania upsilon chapter was founded here on May 8, 1980.

SIGMA XI

International Honor Society in Scientific Research founded in 1886. The local club was chartered in 1968 and has been authorized since 1979 to induct as associate members undergraduate or graduate students showing outstanding promise in original research.

PI SIGMA ALPHA*

National Honor Society in political science founded in 1920. The kappa iota chapter at the University of Scranton was installed on May 9, 1980. Membership limited to students with at least 10 credits in political science, a QPI of at least 3.0 in these courses, and overall rank in the upper third of the class.

ALPHA PHI SIGMA*

The National Criminal Justice Honor Society founded in 1942. Our local epsilon zeta chapter was installed in May, 1982.

PHI SIGMA TAU*

National Honor Society for students of philosophy. The Pennsylvania tau chapter was installed in May, 1982.

UPSILON PI EPSILON

National Computer Science Honor Society. The local gamma chapter was chartered in the spring of 1985.

SIGMA THETA TAU*

International Honor Society in Nursing founded in 1922. Requirements: completion of one-half of the curriculum, demonstrated ability in nursing, and a QPI of 3.0. Our Iota Omega Chapter was chartered in April, 1988.

SPECIAL PROGRAMS

HONORS PROGRAM

The Honors Program provides selected students with greater depth and breadth in their education through seminars and directed independent work. Participants in the program take interdisciplinary courses and seminars as well as tutorials both in and out of their major field. They also complete and defend a project in their major.

Honors courses are designed to intensify the general education requirements. Offerings have included such courses as Victorian Studies, Science and Society, and The Rise of Scientific Thinking. One course is required of each Honors student.

An Honors Tutorial is an exploration of a topic on an individually directed basis. The student meets with a mentor weekly throughout the semester. Three tutorials are required of each Honors Student—at least one in and one outside the major. A fourth tutorial may be taken if the student desires. These tutorials count toward major, cognate, or general education requirements.

In the Honors Seminars a small group of Honors Students meet once a week with the Director and Assistant Director. The Junior Seminar is based on an interdisciplinary reading list; the Senior Seminar is based on the Senior Honors Projects. Since these seminars are over and above ordinary graduation requirements, there is no tuition charge for them.

The Senior Honors Project involves an intensive exploration of a specialized topic. It can be either academic or professional in nature. The student defends the finished project before a board of three faculty members who judge whether it is of Honors caliber.

Dr. Ellen Casey, Director of the Honors Program

ADMISSION

Applications are accepted every fall from those students who have at least eighteen hours of college credit and who expect to graduate after three more years of work at the University. Applicants must ordinarily have at least a 3.3 QPI; a minimum of a 3.5 QPI (cum laude) is required for graduation in the Progam. The number of spaces in the program is limited, and acceptance is based on the applicant's high school and college records, SAT scores, recommendations, application, and interviews. For further information contact Dr. Ellen Casey, Director of the Honors Program.

SCHEDULE

	Fall	**Spring**
Sophomore Year:	Application	Honors Course (3 credits)
Junior Year:	1 or 2 tutorials (3 credits each)	1 or 2 tutorials (3 credits each) Junior Seminar (2 credits toward Honors graduation)
Senior Year:	Honors Project (1 credit) Senior Seminar (1 credit toward Honors graduation)	Honors Project (2 or 5 credits, dependent on program) Defense of Project

SPECIAL JESUIT LIBERAL ARTS PROGRAM

The University's Special Jesuit Liberal Arts Program, available by invitation and application, provides an alternate way of fulfilling a student's General Education requirements. The distribution of courses for members in this program, as indicated below, attempts to foster the following skills:

1. An understanding of key achievements in the literature, history, philosophy, theology and science of our Western classical and Christian heritage.
2. An ability to apply logical, systematic and critical reflection on any given intellectual problem.
3. An understanding of and sensitivity towards the contemporary problems of our day, especially those involving economic, social and political justice.
4. An outstanding ability to communicate clearly and persuasively one's ideas through both the spoken and written word (what Jesuits have historically referred to as "eloquentia perfecta").

Students are also encouraged to become involved in the extra-curricular activities of campus life, to travel abroad if possible, and to acquire on their own the skills needed to participate in today's technological world.

Above all, students are expected to seek out and interact with the professors who are part of this program, which is under the direction of Rev. Ronald H. McKinney, S.J.

Dept. and No.	Fall Semester	Spring Semester	Credits	
	Freshman			
Major	Major	Major	3/4	3/4
Cognate	Cognate	Cognate	3/4½	3/4½
Foreign Language	Modern or Classical	Modern or Classical	3	3
Phil 20-104	Intro to Philosophy	Epistemology	3	3
T/RS-21-Engl. 112	Theology I	Advanced Composition	3	3
Ph. Ed.	Physical Education	Physical Education	1	1
			16	16
	Sophomore			
Major	Major	Major	3/4½	3/4½
Cognate	Cognate	Cognate	3/4	3/4
Cognate	Cognate	Cognate	3/4	3/4
Econ. 10- N. Sci. 110	Contemporary Economics Issues	Scientific Ideas	3	3
Phil. 112-108	Logical/Rhetorical Analysis	Metaphysics	3	3
Ph. Ed.	Physical Education	Physical Education	1	1
			16	16
	Junior			
Major	Major	Major	3/4½	3/4½
Major/Cognate	Major/Cognate	Major/Cognate	3/4	3/4
Cognate	Cognate	Cognate	3	3
T/RS 22-Elec.	Theology II	Theology Elective	3	3
Hum. 151-152	Masterworks I	Masterworks II	3	3
Phil. 110-165	Ethics	Philosophical Topics	3	3
			18	18
	Senior			
Major	Major	Major	3	3
Major	Major	Major	3	3
Hist. 3-4	Europ. History 1500-1815	Europ. History 1815-pres.	3	3
Phil 157-Engl. Elec.	Social Justice	English Lit. Elective	3	3
T/RS-Phil. 159	Theology Elective	Great Books	3	3
			15	15

TOTAL: 130-147 credits
Depending on major

AMERICAN CIVILIZATION

DR. CHAMPAGNE, *Director*

This program offers students in every major the opportunity to study American heritage and current American society from a multi-disciplinary perspective, while satisfying all the requirements of their majors on schedule.

The chief aim of the American Civilization concentration is to provide a systematic way for students to develop a broad-based understanding of our way of life and our national identity. This understanding is of great importance in any program of liberal education, and it should be particularly valuable to students whose career plans include the practice of law, social services, library or museum work, communications and teaching.

The second aim of the program is to give students an attractive way to organize and enhance the value of their General Education electives. Courses in this concentration will satisfy requirements in Areas II, III, IV and V, as well as the Cognate and "Free" areas. American Civilization students will find that their G.E. electives form a coherent pattern, resulting in steadily enriched knowledge of a vital field.

Students in this program will take four core courses (12 credits), and, with the guidance of a faculty advisor, five elective courses (15 credits) focusing on various aspect of American life. They will bring their pursuit of American studies to a climax by taking INTD 40, The American Experience, in their senior year.

Students who complete the American Civilization concentration will have that achievement noted on their transcripts.

REQUIRED CORE COURSES (12 Credits)

English 104	American Literature to 1865	Fr. Joseph Quinn, Dr. Gougeon 3 credits
English 106	American Literature, 1865 to present	Dr. Whittaker, Dr. Gougeon 3 credits
History 136-137	American Culture and Ideas	Dr. Hueston 6 credits

SAMPLE ELECTIVE COURSES (15 Credits Required)

Art 101-102	History of American Art	Prof. Jones
ENGL. 159	American Realism	Fr. Joseph Quinn 3 credits
ENGL. 160	American Prose Masters	Fr. Joseph Quinn 3 credits
ENGL. 165	American Romanticism	Dr. Gougeon
ENGL. 166	Black Literature	Dr. Mitchell
ENGL. 168	American Drama. 1919-1939	Staff
HIST. 104	American Decorative Arts	Dr. Feller
H/PS 124-125	American Political and Social Thought	Staff
HIST./SOC. 134	Intro. to Archaeology in America	Dr. Feller 3 credits
HIST. 177	History of U.S. Immigration	Dr. Hueston
H/PS 188	Ethnic & Racial Minorities in N.E. Pa.	Dr. Earl, Dr. DeMichele
MEDIA 121	Man and Mass Media	Dr. McInerney
PHIL. 142	Pierce and the History of Ideas	Dr. Fairbanks
POL. SCI. 102-103	American National Government	Staff
POL. SCI. 104	The American Presidency	Staff
POL. SCI. 110	Introduction to American Law	Dr. Dougherty
T/RS 154	Religion and the People of America	Fr. Rousseau

EASTERN CHRISTIAN STUDIES

SR. ROCCASALVO, *C.S.J., Coordinator*

Fr. Levko, S.J. *Fr. Sable, S.J.* *Sr. Roccasalvo, C.S.J.*

EASTERN CHRISTIAN STUDIES (ECS) is an interdisciplinary program which holds in great esteem the uniqueness and supreme beauty of the Eastern Christian heritage. For this reason, the program focuses on the impact and contributions of this rich legacy to Western culture. The ECS program encompasses a study of the Byzantine and Slav traditions as well as the Coptic and Near East cultures. The program is offered through the College of Arts and Sciences with Sr. Joan L. Roccasalvo, C.S.J. as coordinator, and the recently established CENTER FOR EASTERN CHRISTIAN STUDIES.

Fr. John J. Levko, S.J. is the Director of the Center, and Fr. Thomas F. Sable, S.J. is the Editor of DIAKONIA, an ecumenical journal devoted to promoting the knowledge and understanding of Eastern Christianity.

ECS: A PRACTICAL ASSET TO THE STUDENT

1) At no extra cost, ECS provides the student with a systematic way of organizing and choosing electives from Areas IV and V (Humanities, Theology, Philosophy).
2) 5 of the 8 required courses in one subject area may constitute or contribute to a Minor, e.g., in History or Theology. (The ECS concentration is broader in scope than a Minor.)
3) ECS offers a wide variety of subjects within the Liberal Arts tradition: History, Theology, Literature, Fine Arts, Russian.
4) The ECS concentration (24 credits) is officially recorded on a student's transcript in addition to his/her Major. Today businesses and graduate schools value an experience of this kind because it enriches the student's background and provides a broad context for his/her Major area of study.

GOALS OF EASTERN CHRISTIAN STUDIES

1. To foster an understanding and appreciation for the Eastern Christian heritage.
2. To enable the student to become well-rounded by deepening and broading his/her perception of the human experience.
3. To study the Eastern Christian traditions from a ecumenical viewpoint.
4. To prepare the student to live his/her future in a pluralistic society, much of which has been influenced by the Byzantine, Slav, Coptic and Near East cultures.

AVAILABLE COURSES

ECS 100	Culture and the Arts (GE IV) Sr. Roccasalvo, C.S.J.
ECS 105	(ART 105) Early Christian and Byzantine Art (GE IV)
ECS 106	(MUS. 106) Choral Music (GE IV) Sr. Roccasalvo, C.S.J.
ECS 107	(SLAV 107) Masterpieces of Russian and Slavic Literature (GE IV) Dr. Petrovic
ECS 110 & 111	(Russ 1&2) Elementary Russian (GE III or IV) Prof. Peregrim
ECS 112 & 113	(Russ 23 & 24) Intermediate Russian (GE III or IV) Prof. Peregrim
ECS 122	(MUS 122) Music in Russia (GE IV) Sr. Roccasalvo, C.S.J.
ECS 125	Political and Social Trends in the 19th — and 20th — century Russian Literature (GE IV) Dr. Williames
ECS 130	(T/RS 130) Prayer (GE V) Dr. Steele
ECS 140	(T/RS 152) Liturgical Theology of the Byzantine Churches. (GE V) Prof. Yevics
ECS 144	(T/RS 144) Intro. to the Theology of the Byzantine Churches (GE V) Fr. Sable, S.J.
ECS 145	(T/RS 145) Intro. to Eastern Liturgies (GE V) Fr. Sable, S.J.
ECS 147	(T/RS 147) Eastern Christian Spirituality (GE V) Fr. Levko, S.J.
ECS 149	(T/RS 155) Intro. to the Greek Fathers (GE V) Dr. Benestad
ECS 150 & 151	(Hist. 150 & 151) Imperial & Revolutionary Russian History; Russian Revolution and Aftermath. (GE IV) Dr. Earl
ECS 155 & 156	(Hist. 155 & 156) Byzantine Civilization (GE IV) Fr. Scott, S.J.

ECS 100 Sr. Roccasalvo, C.S.J.
Culture and the Arts 3 credits
(Required of all students in the ECS program) A study of Eastern Christian culture through their legends and customs, their rituals, music, art, architecture and dance. Includes the cultures of Ancient Greece, Rus'/Ukraine/Great Russia, and the Coptic and Near East cultures (GE IV)

ESC 125 Dr. Lee Williames
Political & Social Trends in the 19th and 20th—Century Russian Literature.
Through a combination of reading some great works of Russian literature, lectures and class discussions will enable the student to gain a knowledge of socio-economic and political tends as well as attitudes in 19th—and 20th—century Russia. A selected study of the great literature and authors of the period: Lermontov, Pushkin, Gogol, Turgenev, Dostoyevsky, Tolstoy, Chekhov, Gorky, Sholokov, Bunin, Pasternak, and Solzhnitsyn. (GE IV)

ELEMENTARY and INTERMEDIATE RUSSIAN (ECS 110 & 111, ECS 112 & 113). See section on Foreign Languages on p. 86.

Center for Eastern Christian Studies.

OTHER SPECIAL PROGRAMS

THREE-YEAR BACHELOR'S DEGREE PROGRAM

The University of Scranton's Curriculum and 4-1-4 calendar allow qualified students to attain their bachelor's degree within three years — thus considerably reducing the overall cost of their undergraduate education and allowing the student to enter the market place or begin graduate and professional studies a year earlier. While Advanced Placement or College Level Examination Programs credits (see Index) are very useful for this, a student who does not bring these from high school may still complete the degree program in most majors within three years through the use of January Intersession courses and/or Summer School sessions. This presumes that a minimum, normal academic progress is being made. Typically two Summer Schools (12 credits each) and two or three January Intersessions will suffice. Especially qualified students may be allowed overloads from the appropriate Dean to further reduce this — as will Advanced Placement credits. The Dean should be contacted as early as possible in a student's career in order to facilitate the needed scheduling. Entering freshman students may want to use the Summer School immediately following their high school graduation to further this three-year program; the Dean of Admissions should be consulted with respect to this. Details on the special Scranton Prep-University Seven Year (4-3) high school-college degree program are available from the Dean of Studies at Scranton Prep.

FIVE-YEAR BACHELOR-MASTER'S DEGREE PROGRAM

Developed in cooperation with the University's Graduate School, this program enables undergraduates to complete both the bachelor's and master's degree program within five years in the fields of English, Business, Chemistry, Biochemistry, and Human Services. Students elect to enter the program after sophomore year. Ordinarily two summers of study or equivalent January intersessions are needed.

FOUR-YEAR BACHELOR-MASTER'S DEGREE PROGRAM

Qualified undergraduates in the department of history and chemistry have the option of pursuing a four-year program leading to simultaneous conferral of bachelor and master's degrees in history, chemistry or biochemisry. Summer work and the use of 12-13 graduate credits in place of undergraduate courses are involved. The departmental chairperson should be consulted for details.

STUDY ABROAD PROGRAM

Students with above average (3.0 QPI) academic records are encouraged to participate in the University's Study Abroad Program. This ordinarily takes place in junior year.

The University of Scranton is affiliated with the Loyola-Rome Center and other Jesuit-sponsored programs abroad. It also participates in the International Student Exchange (ISEP). During the past and present years University students have enrolled in the Loyola-Rome Center, Marquette and Saint Louis University programs in Spain, University College in Galway and Trinity College in Dublin, Beaver College programs in London, the University of Heidelberg, the University of Salzburg, and Kansai University in Japan. Interested students should contact Dr. Mary Engel, the Associate Dean of the College of Arts and Sciences, for more information.

JESUIT EXCHANGE PROGRAM

A variant of Study Abroad is the University's program in conjunction with the 28 Jesuit universities in America by which above-average (3.0 QPI) students may spend one or two semesters of their junior year at another Jesuit institution. These institutions are listed on page 247. In recent years University of Scranton students have attended Boston College, Loyola University in New Orleans, Santa Clara University, and the University of San Francisco. Consult Dr. Mary Engel, the Associate Dean of the College of Arts & Sciences, for details on this program.

INTERNSHIP PROGRAMS

The University's commitment to internships as an integral part of the educational process is strong and growing. In 1987-88, almost 250 students in the College of Arts and Sciences were engaged in internships carrying academic credit related to their major or vocational goals. 165 of these were seniors — one third of the class — in twelve different majors.

Medical Technology majors spend their senior year in eleven different hospitals in New Jersey, Pennsylvania, Ohio, and New York.

Students majoring in Physical Therapy select internships from some 130 regional and national health care facilities and agencies formally affiliated with the University of Scranton program.

Human Service majors select educational, health, welfare, correctional rehabilitation, day care and recreational agencies for their internship settings. Fifty students participated in the undergraduate internship program last year.

Seniors majoring in Accounting are eligible to participate in a 13-week on-the-job internship with both national and regional public accounting firms. This internship usually takes place in December-March of senior year. Selection is made on the basis of QPI rating (minimum 2.67) and on interviews by company representatives. In the most recent year, students worked for such firms as Price Waterhouse, Haskins and Sells, Arthur Anderson, Peat, Marwick, Mitchell & Co., Touche, Ross & Co., Ernst & Ernst, Coopers, Lybrand & Co., in New York, Philadelphia, and other cities. Students majoring in Finance, Management or Marketing are also eligible for internships, both in the Scranton region and in their own localities over the summer months.

Communication and English majors served internships with academic credit in a number of newspaper and television station situations as well as in public relations, campus journalism, theatre directing and related positions.

Political Science and History majors served pre-law internships in private law firms as well as in the Public Defender's Office, District Magistrate offices, District Attorney's office in Scranton, Philadelphia, and a number of other cities.

Computer Science majors participate in the Commonwealth of Pennsylvania's Computer Systems Intern Program, serving 6-month internships in various state agencies in Harrisburg. Students in this department also hold internships in a number of private companies in the Scranton area, in Binghamton and in New York City.

In their junior and senior years, psychology majors taking the field experience course are placed in at least ten different local mental health and social service agencies under individual clinical supervision.

Sociology and Criminal Justice majors spend part of their Junior or Senior year serving internships in criminal justice agencies (corrections, probation & parole services, the District Attorney's Office, Sheriff's and U.S. Marshall's services, private security and legal work), and social work/human service settings (child-care and juvenile programs, Cancer Society, aging services, etc.)

PRE-LAW PROGRAM

The University is justly proud of its tradition in the field of law. Fully fifty percent of the region's lawyers have done their undergraduate pre-law studies at the University.

The strength of the University's liberal education approach to its pre-law program is indicated by the record of success its graduates have had in winning admittance to the nation's leading law schools. Graduates of recent graduating classes have been admitted to some of the most prestigious schools in the nation, including Columbia, Georgetown, the University of Pennsylvania and the University of Virginia, as well as Cornell, Rutgers, NYU, Boston College, Villanova, Catholic University of America, Temple, St. Louis, Dickinson, Boston U., Notre Dame, and twenty other public and private law schools from California to New England.

Pre-Law Curriculum—For admission to law school, no specific undergraduate major is required. In our last senior class the department of history and political science produced the majority of the Scranton graduates admitted to law school. However, students in languages, business, English, education, sociology, communication, law enforcement and psychology also won admittance to law school. The single most important factor in admisssion is not, therefore, a specific major but rather the degree of academic excellence manifested by the student in pursing whatever major has been chosen as the particular field of competence.

Skills and Courses—While pre-law students are free to choose their majors, they should give particular attention to the development of those skills which are important for success in the study and practice of law. The General Education program of the University is designed to enable pre-law students to acquire these skills.

1. Comprehension and proficiency in Oral and Written Communication:

   The University 's freshman courses in Oral Communication (Comm. 2) and Composition (Engl. 7) provide a foundation; pre-law students who complete these courses or whose high school record has exempted them, might then take the following courses offered by the faculty:

   Engl. 112—Advanced Composition
   Engl. 12—Writing for the Law
   Comm. 112—Debate and Argument

   The student should also consider participating in the Noel Chabanel Debate Society; the *Aquinas,* the college newspaper; the yearbook; and such campus journals as *Espirit* and *Retrospect.*

II. A Critical Understanding of Human Institutions and Values:

   Here the University's courses in the field of history and literature, philosophy and theology are most helpful. The curriculum allows students to use courses of interest as cognates to their major program and as part of the humanities area in the General Education program. British and American Constitutional History (Hist. 122-123, 142, 143) are especially recommended.

III. Creative Power in Thinking:

   Legal studies and legal work demand the ability to think clearly, carefully and independently.

It is important therefore that pre-law students cultivate skills in research, logic and critical analysis. Especially recommended are:

Philosophy 28—Logic
Philosophy 107—Philosophy of Law
Phil. 112—Logic/Rhetorical Analysis
Phil. 131-134—Political Philosophy
Comm. 103—Logic and Rhetoric

Similarly, quantitative skills are needed. The General Education program allows each student the opportunity for some background in the natural and quantitative or social sciences. Especially recommended as electives or cognates to the major program are:

Acc. 3-4—Accounting
C/LE 151—Forensic Chemistry
Pol.Sci. 133-136—Social Science Statistics I-II
Math 1-2—Math Discovery

Pre-Law Internships—Interested students with Quality Point Index above 3.0 at the time of application may, with the approval of the Dean, receive academic credit for internships served in the offices of either private law firms or various legal agencies such as the District Attorney, Public Defender, or District Magistrate. Prior approval of the planned internship is necessary. Application forms for these internships are available from the Pre-Law Advisor.

Pre-Law Advisory Team—Continuing advice on course selection, career planning, and the procedures for law school application is provided by a Pre-Law Advisory Team, composed of Dr. Frank X. J. Homer and Dr. Robert Hueston of the History Department, along with the University's Office of Career Services. The Team is assisted by both the:

Pre-Law Advisory Board, a group of regional lawyers which provides for close contact between the local legal community, a range of national law schools, and the University's pre-law program; and the

Pre-Law Society, a student organization which provides a forum for speakers invited on campus to discuss the many aspects of the legal profession.

Law School Admission Test—Along with a student's undergraduate academic record, the LSAT score is a critical factor in the law school admission process. Ordinarily, pre-law students take the LSAT at the end of their junior year. As a means of assisting University students to score up to their fullest potential on the LSAT, on-campus LSAT workshops are offered at least twice each year. These provide University students with an alternative to costly commercial test preparation services.

Dr. Frank Homer,
Professor of History
University Pre-Law Advisor

PRE-MEDICAL PROGRAM

The success of the University's pre-medical program has been outstanding. Notwithstanding the fact that the period 1983-84 through 1987-88 has been the most competitive in the history of American medical school admissions, the University of Scranton placed an average of over 50 students per year into American medical schools. For Fall 1988 the number admitted is 65.

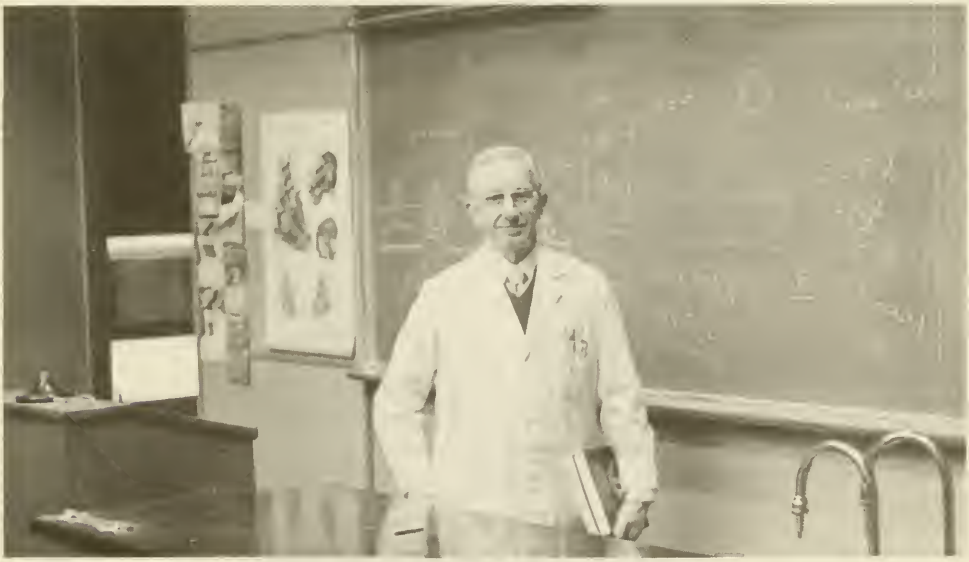
Further, graduates from the pre-professional program have been accepted into dental schools at a rate of 15 per year, and to schools of podiatry, optometry, and other health professions at a rate of 12 per year.

In the past five years, University of Scranton students received approximately 500 acceptances to medical or dental schools including many of the most prestigious in the country. Harvard, Georgetown, Cornell, Columbia, Johns Hopkins, Rutgers, University of Pennsylvania, Hershey, Thomas Jefferson, George Washington, Hahnemann, University of Pittsburgh, Temple, St. Louis University, Medical College of Pennsylvania, Case-Western Reserve, SUNY-Buffalo, Fairleigh Dickenson, the University of Washington at Seattle, the University of Chicago, the University of Oklahoma, and New York Medical College.

In addition, other students were admitted to schools of Osteopathic Medicine and Surgery, Podiatry, Pharmacy, Veterinary Medicine, and Graduate School programs in biology, chemistry, biochemistry, psychology, pharmacology and other health-related fields.

Pre-Medical Curricula—Most pre-medical students major in biology. The pre-medical advisor's specific course recommendations for biology majors are listed on the next page. Students majoring in chemistry or biochemistry at the University are also regularly admitted to medical or dental schools. Entering pre-medical students may also select General Area Studies in Natural Sciences described earlier in this catalog; they should enroll in the Biology and Chemistry sequences.

Biochemistry, biophysics and medical technology provide alternative majors in second, third, or fourth year for those pre-medical biology students who subsequently choose not to apply to medical school.



Dr. Joseph Evans, Professor of Biology, Pre-Medical Advisor.

Recommended Curriculum for Biology Majors—The pre-medical advisor is Dr. Joseph Evans, Professor of Biology. He recommends the following structured curriculum for pre-professional students majoring in biology. Completion of this sequence of courses will satisfy all requirements for the biology major as indicated on pages 42 and 43.

RECOMMENDED CURRICULUM FOR
PRE-MEDICAL/PRE-PROFESSIONAL STUDENTS

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Biol 1-2	General Biology I-II	4½	4½
COGNATE	Chem. 11-12	General & Analytical Chemistry	4½	4½
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph. Ed. 1-2	Basic Physical Education	1	1
			16	19
		SOPHOMORE		
MAJOR	Biol. 21-22 or 23	Comp. Vertebrate Anatomy or Genetics	4	4
COGNATE	Chem. 101-102	Organic Chemistry I-II	4½	4½
COGNATE	Math 13-14 or Math. 14-21	Pre-Calculus Math.—Calculus or Calculus I-II	4	4
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities	Electives	3	6
PHYS EDUC	Ph. Ed. 23-24	Advanced Physical Education	1	1
			19½	19½
		JUNIOR		
MAJOR	Biol. 101, 105, 120-121	Biology Electives	4½	4
MAJOR	Biol.**	Population Course**	4	
COGNATE	Physics 9-10	General Physics	4	4
GE AREA II	Social/Behavior	Elective		3
GE AREA V	Phil. 110-132*	Ethics-Medical Ethics*	3	3
GE AREA V	T/RS 22	Theology II		3
GE FREE	Electives	Electives	3	3
			18½	20
		SENIOR		
MAJOR	Biol. 103, 122-123 150, 154	Biology Electives	6	7
GE AREA II	Social/Behavior	Electives	6	3
GE AREA IV	Humanities	Electives	3	3
GE ARE V	T/RS 190*	Biomedical Ethics*		3
			15	16
			TOTAL: 143½ credits	

It is also recommended that pre-professional students take 6 credits of English literature in Area IV, and both Communication 2 and English 7 in Area III. Medical school candidates are urged to add Chem. 121, Biochemistry, in senior year.

*Phil. 132 and/or T/RS 190 are recommended as Area V electives.

**See p. 42 for list of courses in the Population group.

The College of Arts and Sciences

Dr. John W. Carlson, Dean

The College of Arts and Sciences is the largest academic division of the University with more than 30 areas of study. Its liberal arts programs serve students well in many different careers. CAS programs also lay the foundation for professional study in law, medicine, and dentistry, as well as for graduate study in various fields.

BIOLOGY

DR. DelVECCHIO, *Chairperson*

Courses in the Department of Biology are designed to achieve the following objectives: 1. to present the fundamental scientific facts and concepts which are needed for an understanding of the living world and people's relation to it; 2. to prepare students for advanced study or work in other biological fields.

The Bachelor of Science in Biology Program supplies preprofessional preparation meeting all requirements and recommendations of professional schools (medicine, dentistry, veterinary medicine).

While the department's record in the preparation of physicians is an impressive one as indicated earlier in the Pre-Medical section, its record as one of the baccalaureate sources of PhD's in the biological sciences is equally prestigious. A 1982 study by the office of institutional research at Franklin and Marshall College shows that over the last 60 years, the University of Scranton ranked 27th out of 867 four-year, private, primarily undergraduate institutions.

The biology curriculum appears on the following page. In selecting biology electives, all majors are required to take at least one course in each of the following 5 course groups (special exemption may be made by permission of the Chairperson):

Cell (C) - Biol. 101, 103, 121, 122, 128, 150
Molecular (M) - Biol. 102, 122, 126, 154
Chem. 113, 115, 116
Organismal (O) - Biol. 21, 22, 105, 115, 120, 121, 122, 123, 124, 128, 132, 156, 165.
Genetics (G) - Biol. 23, 130, 154.
Population (P) - Biol. 108, 115, 124, 130, 132, 156, 165.

The premedical advisor's elective recommendations for preprofessional students are listed on page 40.

BIOL. 1 & 2 Staff
General Biology 9 credits
A comprehensive study of the nature of living organisms, both plant and animal, their structure, function, development and relationships, including the problems of development, heredity and evolution. 3 hours lecture and 3 hours laboratory each semester.

BIOL. 3 & 4 Dr. Townsend
General Biological Science 6 credits
The nature of living organisms and general biological principles, as they affect man and in relation to his problems, are stressed in general terms. (GE AREA I)

BIOL. 5 Dr. M. Carey
Social Biology 3 credits
A discussion of current advances and controversies in biology and medicine, their social and ethical implications, and public policy problems raised by them. Topics vary with the times, but may include such things as definitions of life and death, organ transplantation, population control, genetic engineering, environmental crises, evolution vs. creationism, and the nature of human nature. (GE Area I).

BIOL. 10 Dr. DelVecchio
Behaviors and Health 3 credits
The interrelationship of biological, physical, and social factors as they impact on one's health. An awareness that health is a matter of personal responsibility will be arrived at by an analysis of change, stress, aging, sexuality, nutrition, weight control, drugs and behavior, disease, environmental factors, and health care. (GE AREA I)

BIOL. 13 & 14 Staff
Structure and Function of the Human Body 8 credits
A general study of the anatomy and physiology of the human organism emphasizing the body's various coordinated functions from the cellular level to the integrated organ systems. 3 hours lecture and 2 hours laboratory. (Course not open to Biology majors.)

BIOL. 21 & 22 Fr. MacEntee
Comparative Vertebrate Anatomy (O) 8 credits
(Prerequisite: Biology 1-2) Structure and phylogeny of vertebrate organ-systems, emphasizing mammalian structure in relation to its function. Amphioxus, shark, and necturus are subjected to detailed laboratory study in first semester and the cat in the second semester. 2 hours lecture and 4 hours laboratory.

BIOL. 23 Staff
Genetics (G) 4 credits
(Prerequisite: Biology 1-2 or 3-4) Principles and theories of heredity as developed by experimental breeding biometrical and cytological methods with their applications to plant, animal and human heredity. 3 hours lecture and 2 hours laboratory.

BIOL. 24 Dr. McDermott
The ABC's of Genetics 3 credits
The basics of heredity for the non-science major, with emphasis on the human. Provides the biological background necessary for the non-scientist to understand his/her own hereditary background and to have informed opinions about societal issues related to genetics. Includes Mendelian genetics, genetic diseases, population genetics, evolution, molecular genetics, genetic engineering, etc. (GE AREA I)

BIOL. 101 Dr. DelVecchio
Cellular Biology (C) 4½ credits
(Prerequisite: Biology 1-2) Functional dynamics of cellular organelles are explained in terms of the experimental evidence which helped elucidate cellular function. Bio-energetics, molecular evolution, and cytogenetics are also utilized. 3 hours lecture. 3 hours laboratory.

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FRESHMAN		
MAJOR	Biol. 1-2	General Biology I-II	4½	4½
COGNATE	Chem. 11-12	General & Analytical Chemistry	4½	4½
GE AREA III	Communications*	Electives*	3	3
GE AREA IV	Humanities*	Elective*		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	19
		SOPHOMORE		
MAJOR	Biology	Biology Electives	4	4
COGNATE	Chem. 101-102	Organic Chemistry I-II	4½	4½
COGNATE	Math 13-14 or Math 14-21	Pre-Calculus Math—Calculus I or Calculus I-II	4	4
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities*	Electives*	3	6
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			19½	19½
		JUNIOR		
MAJOR	Biology	Biology Electives	6	6
COGNATE	Physics 9-10	General Physics	4	4
GE AREA II	Social/Behavior	Elective		3
GE AREA V	Phil. 110 Elective	Ethics-Elective	3	3
GE AREA V	T/RS 22	Theology II	3	
GE FREE	Electives	Electives	3	3
			19	19
		SENIOR		
MAJOR	Biology	Biology Electives	6	7
GE AREA II	Social/Behavior	Electives	6	3
GE AREA IV	Humanities*	Electives*	3	3
GE AREA V	Phil.-T/RS	Philosophy and/or Religious Studies		3
			15	16

*General Education recommendations:
6 credits English literature in Area IV, Comm. 2 and English 7 for Area III. TOTAL: 143 Credits

MINOR: To gain a minor in biology, a student must complete Biology 1-2 and 20 additional Biology elective credits.

BIOL. 102 Dr. Dwyer
Molecular Biology (M) 4½ credits
(Prerequisite: Biology 1-2, Chem. 11-12) The structure and function of living cells from a molecular viewpoint; nucleic acid structure and function, enzyme structure and function, biochemical mechanisms of differentiation, membrane function, and molecular evolution. 3 hours lecture, 3 hours lab.

BIOL. 103 Dr. Evans
Histology (C) 4 credits
(Prerequisite: Biology 21-22) The microscopic structure and the functioning relationships of vertebrate tissues and organs with most attention devoted to the mammal. 2 hours lecture and 4 hours laboratory.

BIOL. 105 Dr. Evans
Embryology (O) 4 credits
(Prerequisite: Biology 21-22) Comparative study of reproduction, gametogenesis, fertilization, cleavage, morphogenesis, development of organ systems in frog, chick and pig. 2 hours lecture and 4 hours laboratory.

BIOL. 107 Staff
Anatomy & Physiology 3 credits
Fundamentals of structure and function of the human body to develop an understanding of its physical nature and operation (GE AREA I).

BIOL. 108 Dr. Townsend
Principles of Ecology (P) 4 credits
(Prerequisite: Biology 1-2 or 3-4) Study of physical, chemical, and biological environmental factors that influence organisms and the interrelationships between organisms from individual to community level. 3 hours lecture, 2 hours laboratory. Fall — even years.

BIOL. 115 Dr. Carey
Animal Behavior (P,O) 4 credits
(Prerequisite: Biol. 1-2 or 3-4) Classification of behavior types, development, functional advantages and evolution of behavior, and social and physiological aspects studied in lower and higher organisms. 3 hours lecture and 2 hours lab. Spring only.

BIOL. 120 Staff
General Physiology (O) 4½ credits
(Prerequisite: Biology 1-2, Chem. 11-12) Physiological processes underlying the functioning of the animal organism. Biochemistry of protoplasm, enzymes, irritability, excitation, conduction, contractibility, cellular physiology, and functions of mammalian organ-systems. 3 hours lecture and 3 hours laboratory.

BIOL. 121 Fr. Beining, Dr. Evans
Microbiology (C,O) 4½ credits
(Prerequisite: Biology 1-2, Chem. 11-12) Structure, function, growth, reproduction, heredity and relationships of bacteria, yeasts, molds, virus, including a brief survey of pathogens, and life cycles of parasitic microzoa, and also an introduction of disease and immunology. 3 hours lecture and 3 hours laboratory. For all students except nursing.

BIOL. 122 Fr. Beining
Principles of Immunology (C,O,M) 4½ credits
(Recommended prerequisite: Biology 121) The basic molecular, cellular and organismal aspects of the immune reponse, emphasizing chemical and functional bases of antigens and immunoglobulins, cellular and humoral response, tolerance, immune deficiency, hypersensitivity, autoimmunity, blood groups, transplantation. Spring only. 3 hours lecture and 3 hours laboratory.

BIOL. 123 Staff
Parasitology (O) 4 credits
(Prerequisite: Biology 1-2) Study of various types of human, animal and plant parasites including host-parasite resistance, tolerance, and immunity. Origin and evolution of parasites also discussed. 2 hours lecture and 2 hours laboratory. Intersession only.

BIOL. 124 Dr. Anderson
Comparative Animal Physiology (P,O) 3 credits
(Prerequisite: Biology 120) Lectures emphasize the physiological principles involved in adaptations of animals in their environment. Emphasis is placed on the similarities and differences in which related forms have solved these problems. Including such mechanisms of osmotic control, temperature regulation, nerve and muscle physiology, sensory perception, etc. 3 hours lecture. Spring — even years.

BIOL. 125 Dr. McDermott
Introductory Medical Microbiology 3 credits
(Prerequisite: Biology 13-14; Chemistry 13-14) Fundamentals of Microbiology, including structure, function, identification, pathogenesis, epidemiology and control of microorganisms with special emphasis on human pathogens. 2 hours lecture and 2 hours laboratory. Course not open to biology majors.

BIOL. 126 Dr. McDermott
Virology (M) 3 credits
(Prerequisite: Biology 1-2; Chemistry 101-102) Detailed study of the bacterial, plant and animal viruses, including structure, chemistry, replication, genetics, origin and evolution, as well as pathogenesis of and immunity against selected viral pathogens. 3 hours lecture. Fall even years.

BIOL. 128 Dr. Carey
Endocrinology and Reproduction (C,O) 3 credits
(Prerequisite: Biol. 120) An examination of the mammalian endocrine system with an emphasis on molecular mechanism of hormone action, feedback control of hormone production, and integration with other physiological systems. There is a strong emphasis on reproductive endocrinology. No lab. 3 hours of lecture. Spring only.

BIOL. 130 Dr. Carey
Evolution (G, P) 3 credits
(Prerequisite: Biology 1-2 or 3-4) A consideration of the theories of evolution and evidences for them in plants and animals. Population and the adaptiveness of various organic traits. Fall — odd years.

BIOL. 132 Dr. Hardisky
Plant Physiology (O,P) 4 credits
(Prerequisite: Biol. 1 or 3 or permission of instructor) An introduction to the functional anatomy of plants including some basic aspects of plant physiology. Areas of study will include plant structure, photosynthesis, respiration, mineral nutrition, water relations, productivity, and energy flow. 3 hours lecture and 2 hours laboratory.

BIOL. 134 Staff
Undergraduate Research Variable credit
(Prerequisite: 12 credits in Biology. Individual problems for advanced students with sufficient background in biological and physical sciences. Subject time and credit arranged individually.

BIOL. 150 Dr. Anderson
Electron Microscopy 4 credits
(Prerequisite: Biology 1-2, Consent of instructor) Introduction to the mechanics of the electron microscope with emphasis on standard laboratory techniques, including preparation of materials, sectioning, viewing and photographic analysis. 1 hour lecture and 6 hours laboratory. Spring only.

BIOL. 154 Dr. DelVecchio
Genetic Engineering (M) 4½ credits
(Prerequisite: Biology 1-2) A detailed study of the nature and function of the gene with emphasis on the experimental evidence which gave rise to the present concepts of genetic engineering. Strong emphasis is placed on recombinant DNA techniques in the lecture and in the laboratory sections. 3 hours lecture and 3 hours laboratory. Spring only.

BIOL. 156 Dr. Hardisky
Marine Biology (O,P) 4 credits
(Prerequisite: Biol. 1 or 3 or permission of instructor). A survey of the ecology of marine and estuarine systems. Areas covered include soil chemistry, halophyte physiology, tidal marsh ontogeny, ecosystem function and the consequences of human alteration of the coastal zone. Lab includes two mandatory weekends in Lewes, De. conducting field experiments. Fall only.

BIOL. 165 Dr. Conway, Dr. Carey
Tropical Biology (O,P) 3 credits
Study of the organization of tropical communities. Students will be introduced to a variety of tropical areas, including coral reefs, sandy beaches, turtle grass beds, mangrove swamps, rainforests, savannahs, tide pools, and rocky shores. Approximately 2 weeks of the course will be spent at a biological station in the American tropics. (Majors and GE Area I) Intersesion only.

BIOL. 170 Staff
Special Topics in Biology 2-4 credits
Study and analysis of selected topics in biology. The particular topic will vary from year to year based on student/faculty interest and current research advances. May include such topics as genetic engineering, sensory reception, membrane biology, population genetics, etc.

BIOL. 172 Dr. Townsend
Biostatistics 3 credits
(Prerequisite: Math 13) Data analysis and statistical techniques in biology and medicine; including probability and frequency distributions, descriptive statistics, hypothesis testing, and various parametric and nonparametric statistical tests. Course will introduce and involve use of one or more computerized statistical programs. Spring — odd years.

COURSE GROUPS:
C— Cell Biology
O—Organismal Biology
G—Genetics
M—Molecular Biology
P—Population Biology

Paul Beining, S.J., Ph.D., and Frank J. MacEntee, S.J., Ph.D., Professors of Biology.

CHEMISTRY

DR. HART, *Chairperson*

The department offers five majors: Chemistry, Biochemistry, Chemistry-Business, Chemistry-Computers, and Medical Technology. The program in Chemistry is approved by the American Chemical Society, which means that graduates may be certified by the American Chemical Society if they meet the requirements. In addition, Chemistry and Biochemistry are offered in conjunction with the Graduate School in five-year B.S.-M.A. degree programs. The strength of the department is indicated by the fact that the University of Scranton has been one of the leading schools in the country in the number of master's degrees awarded in chemistry.

The strength of the department is also demonstrated by a recent study of the office of institutional research at Franklin and Marshall College which ranked the University of Scranton 50th out of 867 private, four-year, primarily undergraduate colleges as the baccalaureate source of those earning Ph.D.'s in chemistry between 1920 and 1980.

Graduates of the department in recent years have been admitted to doctoral programs to a number of major universities including Harvard, Cornell, Johns Hopkins and Maryland. In addition, a number of students have attended medical and dental schools and some have gone on to law school.

In both the Chemistry and Biochemistry programs, the departmental General Education Area recommendations are six credits of modern language from AREA III, Area IV, or FREE AREA.

MINOR. The minor in Chemistry will include the following requirements: Organic chemistry (6 credits), Physical chemistry (6 credits), Laboratory (3 credits).

CHEMISTRY

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FRESHMAN		
MAJOR	Chem. 11-12	General Analytical Chemistry I-II	4½	4½
COGNATE	Math. 13-14 or 14-21	Pre-Calculus Math & Analysis I or Analysis I-II	4	4
GE AREA II	Social/Behavior	Elective		3
GE AREA III	Communications*	Electives*	3	3
GE AREA IV	Humanities	Elective	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			18½	18½
		SOPHOMORE		
MAJOR	Chem. 101-102	Organic Chemistry I-II	4½	4½
MAJOR	Chem. 130	Inorganic Chemistry		3
COGNATE	Math 21-22 or 22-101	Analysis II-III or III and Diff. Equations	4	4
COGNATE	Physics 11-12	Elements of Physics	4	4
GE AREA V	T/RS 21	Introduction to Theology	3	
GE AREA III	Cmps. 20	Computer Science	3	
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			19½	16½
		JUNIOR		
MAJOR	Chem. 103-125	Organic Chem. III-Instrum. Anal.	5	5
MAJOR	Chem. 123-124	Physical Chemistry I-II	4½	4½
MAJOR	Chem. 127-128	Chemical Literature-Seminar	1	1
GE AREA II	Social/Behavioral	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA IV	Phil. 110	Ethics	3	
GE FREE	Elective	Elective		3
			19½	19½
		SENIOR		
MAJOR	Chem. 135	Adv. Inorganic Chem.		4½
MAJOR	Chem. 131-132	Undergraduate Research	1½	1½
MAJOR	Chem. Elective	Chemistry Elective	3	
GE AREA II	Social/Behavioral	Elective		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS 22-Phil.-T/RS	Theol. II-Phil./Theol. Elec.	6	3
GE FREE	Elective	Elective	3	
			16½	15

TOTAL: 143½ credits

*Department recommends Comm. 2 and Engl. 7

N.B. For A.C.S. certification, Chemistry majors must complete Analysis III and Math 101.

Ger. 175-6 (Sci. German) may be taken as Humanities electives.

BIOCHEMISTRY

The Bachelor of Science in Biochemistry Program parallels the B.S. in Medical Technology for the first two years so that opportunity is afforded the student to change from one program to the other.

MINOR. The minor in Biochemistry will include the following requirements: Organic chemistry (6 credits), Biochemistry (3 credits), Biophysical Chemistry (3 credits), Laboratory (3 credits).

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Chem. 11-12	General Analytical Chemistry I-II	4½	4½
COGNATE	Math. 13-14 or 14-21	Pre-Calculus Math & Analysis I or Analysis I-II	4	4
COGNATE	Biol. 1-2	General Biology I-II	4½	4½
GE AREA III	Communications*	Electives*	3	3
GE AREA V	T/RS 21	Introduction to Theology		3
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			17	20
		SOPHOMORE		
MAJOR	Chem. 101-102	Organic Chemistry I-II	4½	4½
MAJOR	Chem. 130	Inorganic Chemistry		3
COGNATE	Biol. 121-120	Microbiology-General Physiology	4½	4
GE AREA II	Social/Behavioral	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy		3
GE AREA III	Cmps. 20	Computer Science	3	
GE AREA IV	Humanities	Elective	3	
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			19	18
		JUNIOR		
MAJOR	Chem. 103-125	Organic Chem. III-Instrumental Analysis	3½	5
COGNATE	Phys. 9-10	General Physics	4	4
MAJOR	Chem. 127-128	Chemical Literature-Seminar	1	1
GE AREA II	Social/Behavior	Electives	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
GE AREA V	T/RS 22	Theology II		3
GE FREE	Elective	Elective		3
			17½	19
		SENIOR		
MAJOR	Chem. 113-114	Biophysical Chemistry I-II	4½	4½
MAJOR	Chem. 121-122	Biochemistry II	6	3
MAJOR	Chem. 131-132	Undergraduate Research	1½	1½
GE AREA IV	Humanities	Electives	3	6
GE AREA V	Phil-T/RS	Electives	3	3
			18	18

TOTAL: 147 credits

*Department recommends Engl. 7, Comm. 2

CHEMISTRY-BUSINESS

The Chemistry-Business major combines theoretical and technical instruction in Chemistry with management training in Business. Graduates of this program will be concerned not only with chemical research and technological development but also with management problems in science-related industries.

Most chemistry majors tend to be research-oriented although almost half of the approximately 100,000 chemists employed in American private industry are engaged in work other than research and development: management, marketing and sales. This combined degree was formulated to prepare chemists to assume these latter responsibilities.

From the point of view of the business student, almost one-third of all business graduates can expect to be employed in a chemistry related field: pharmaceuticals, plastics, petroleum, etc. Most business majors employed in such industries must develop, often on their own, the technical knowledge needed to understand their company's operations and products. A fundamental background in chemistry as provided in this concentration is a distinct advantage to individuals planning such a career.

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FRESHMAN		
MAJOR	Chem. 11-12	General Analytical Chemistry I-II	4½	4½
MAJOR	Econ. 11-12	Principles of Economics I-II	3	3
COGNATE	Math 13-14	Pre-Calculus Math & Analysis I	4	4
GE AREA III	Communications*	Elective*	3	3
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			15½	15½
		SOPHOMORE		
MAJOR	Chem. 101-102	Organic Chemistry I-II	4½	4½
MAJOR	Acc. 3-4	Financial—Managerial Acctg.	3	3
GE AREA V	Phil. 20	Introduction to Phil.	3	
GE AREA III	CMPS 21	Introduction to CMPS	3	
GE AREA IV	Humanities	Electives		6
GE AREA V	T/RS 21	Introduction to Theology	3	
GE AREA V	Phil. 110	Ethics		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			17½	17½
		JUNIOR		
MAJOR	Chem. 171	Industrial Chemistry	3	
MAJOR	Chem. 128	Seminar		1
MAJOR	Mgt. 108	Org. & Mgt.	3	
GE AREA II	Mgt. 116	Organizational Behavior		3
MAJOR	Mkt. 107	Managerial Marketing-	3	
MAJOR	Fin. 110	Corporate Finance		3
COGNATE	CMPS 127	Information Systems	3	
COGNATE	Chem. 149	Chemical Statistics		3
GE AREA II	Social/Behavior	Elective		3
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil. 133-T/RS 22	Business Ethics-Theology II	3	3
GE FREE	Elective	Elective	3	
			18	19
		SENIOR		
MAJOR	QMS 109-115	Intro. to Mgt. Science—Prod. and Op. Mgt.	3	3
MAJOR	Mgt. 9	Legal Environment of Business	3	
COGNATE	Phys. 9-10	General Physics	4	4
GE AREA II	Social/Behavioral	Electives	3	3
GE AREA IV	Humanities	Electives	6	3
GE AREA V	Phil.-T/RS	Elective		3
			19	16
			TOTAL: 138 credits	

*Department recommends Comm. 2 and Engl. 7

CHEMISTRY-COMPUTERS

The program in Chemistry-Computers is designed to provide a vehicle for preparing students in the area of intensive computer use in the field of chemistry. The use of computers has long been important in chemistry, but in recent years areas such as molecular modeling and design have become increasingly important. Drug companies use these techniques for the design of drugs for particular medical problems. In addition, most of the modern analytical instruments are highly enhanced by on-line computer processing of data. This program is designed to enable students to enter industry or graduate programs in areas such as computational chemistry, chemical information retrieval, or molecular design.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Chem. 11-12	Gen. & Anal. Chem.	4½	4½
COGNATE	Math. 12-14	Discrete Structures-Analysis I	4	4
GE AREA III	Communications*	Electives*	3	3
MAJOR	CMPS 24-25	Intro. to Comp. Sci. I-II	3	3
GE AREA II	Social/Behavioral	Elective		3
GE AREA V	Phil. 20	Intro. to Philosophy	3	
PHYS. EDUC.	Ph.Ed.	Basic Phys. Ed.	1	1
			18½	18½
		SOPHOMORE		
MAJOR	Chem. 101-102	Org. Chemistry I-II	4½	4½
COGNATE	Math 21-22	Analysis II-III	4	4
COGNATE	Phys. 11-12	Elements of Physics	4	4
GE AREA III	Communictions*	Elective*		3
GE AREA V	T/RS 21	Theology I	3	
MAJOR	CMPS 110-100	Data Struct.-Mach. Org.	3	3
PHYS EDUC	Ph.Ed.	Phys. Ed.	1	1
			19½	19½
		JUNIOR		
MAJOR	Chem. 125	Instrumental Analysis		5
MAJOR	Chem. 127-8	Chem. Lit.—Seminar	1	1
MAJOR	Chem. 123-124	Physical Chemistry	3	3
GE AREA II	Social/Behavioral	Electives	3	3
GE AREA IV	Humanities	Electives	6	3
GE AREA V	Phil. 110	Ethics	3	
COGNATE	Math 101	Differential Equations		4
MAJOR	CMPS 101	Operating Systems	3	
			19	19
		SENIOR		
MAJOR	CMPS 130	Numerical Analysis	3	
GE AREA II	Social/Behavioral	Elective		3
GE AREA IV	Humanities	Electives	3	6
GE AREA V	T/RS 22; Phil.-T/RS	Theol. II; Phil.-T/RS Elec.	6	3
MAJOR	Chem./CMPS Elec.	Chem./CMPS Elec.	3	3
MAJOR	Chem. 131-2	Undergrad. Research	1½	1½
			19½	16½
			TOTAL:	147 credits

*Department recommends Comm. 2 and Engl. 7

B.S. IN MEDICAL TECHNOLOGY

The Bachelor of Science in Medical Technology degree program, under the direction of Dr. Michael Cann, is designed to train and qualify students as medical technologists or clinical laboratory scientists serving hospitals, clinical laboratories, industrial or research institutions. The program, one of the largest in the commonwealth, meets and exceeds the requirements of the Committee on Allied Health Education and Accreditation. For 1987-88, eleven students received acceptances at five different hospitals for their clinical (senior) year.

The program involves the satisfactory completion of the first three years of a curriculum of study (indicated below) at the University of Scranton and the fourth year of clinical education at a hospital having a School of Medical Technology approved by the CAHEA through the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). After completing the program, students take a national certification examination. To date the University has arranged affiliation with hospitals in the cities of Allentown, Bryn Mawr, Abington, Danville, Williamsport, Somerville, Wilkes-Barre, New Brunswick, Philadelphia, Scranton and Paterson. See affiliations at the end of this Bulletin.

The curriculum for the BSMT parallels the B.S. in Biochemistry program so that students have the option to change to the latter after two years, should their career goals change.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Chem. 11-12	General Analytical Chemistry I-II	4½	4½
COGNATE	Biol. 1-2	General Biology I-II	4½	4½
GE AREA II	Social/Behavioral	Elective		3
GE AREA III	Engl. 7-Comm. 2	Composition-Fund. of Speech	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS	Theology I		3
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			16	19
		SOPHOMORE		
MAJOR	Chem. 101-102	Organic Chemistry I-II	4½	4½
COGNATE	Biol. 121-120	Microbiology—General Physiology	4½	4½
COGNATE	Math 13-14	Pre-Calculus Math-Analysis I	4	4
GE AREA IV	Humanities	Elective	3	3
GE AREA V	Phil. 110-T/RS 22	Ethics-Theol. II	3	3
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			20	20
		JUNIOR		
MAJOR	Chem. 115-125	Intro. Biochem I-Instrum. Anal.	3	5
COGNATE	Phys. 9-10	General Physics	4	4
COGNATE	Biol. 122	Principles of Immunology	3	
GE AREA II	Social/Behavioral	Elective		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 132; Phil.-T/RS	Medical Ethics; Phil.-Theol. Elec.	3	3
COGNATE	CMPS 20	FORTRAN 77	3	
			19	18
		SENIOR		
		Clinical Education		
MAJOR		Clinical Microbiology		
MAJOR		Clinical Chemistry		
MAJOR		Clinical Hematology/Coagulation		
MAJOR		Clinical Immunohematology		
MAJOR		Clinical Immunology/Serology		
MAJOR		Clinical Seminar		
			16	16

TOTAL: 144 credits

N.B. There is a $125 Clinical Year Fee charged for each semester of senior year to cover University administrative cost. The student is not, however, charged University tuition for the credits earned in senior year. Some hospitals may charge their own fees. The department has an outstanding record in having its students accepted into medical technology programs. It should be clear, however, that admission to clinical education is competitive and dependent on the student's academic record and success in the interview. The hospital is responsible for selection. A delay in beginning the clinical education may delay a student's graduation. Credits for senior year courses vary from 28 to 32 depending on hospital. Course titles in that year may also vary.

CHEM. 3 Staff
Elements of Chemistry 3 credits
An elemental study of the field of chemistry for the non-science major; concepts of structure, states of matter, modern developments, implications of the field for modern society. 3 hours lecture.
(GE Area I)

CHEM. 11-12 Staff
General and Analytical Chemistry 9 credits
A study of the laws, theories and principles of general chemistry together with qualitative and quantitative analysis. Laboratory work covers semi-micro techniques for qualitative and quantitive analysis (gravimetric and volumetric analysis). 3 hours lecture and 3 hours laboratory each semester.

CHEM. 13-14 Staff
Introductory Chemistry 8 credits
A study of the fundamental concepts of general chemistry, organic chemistry, and biochemistry. Laboratory work emphasizes skills and procedures relevant to the living system. 3 hours lecture and 2 hours laboratory each semester.

CHEM. 101-102 Staff
Organic Chemistry 9 credits
(Prerequisites: Chemistry 11-12) An introduction to the chemistry of the principal aliphatic and aromatic compounds of carbon and their derivatives. Laboratory work includes investigation of the chemical properties and synthesis of the compounds studied. 3 hours lecture and 3 hours laboratory each semester.

CHEM. 103 Drs. Cann, Dickneider
Organic Chemistry III 3½-5 credits
(Prerequisites: Chemistry 101-102) A continuation of Chemistry 101-102, emphasizing the study of the major types of organic mechanisms. Laboratory work involves advanced techniques. 2 hours lecture and 6 hours laboratory (3 hour lab for biochemistry majors).

CHEM. 113 Drs. Baumann, Hart
Biophysical Chemistry I 4½ credits
(Prerequisite: Chemistry 101-102) An introduction to the application of physical-chemical principles to biological problems. This involves aqueous solutions, colloidal chemistry, thermodynamics, electrochemistry, chemical kinetics and nuclear chemistry. Laboratory work involves experimental application of the lecture material. 3 hours lecture, 3 hours laboratory.

CHEM. 114 Drs. Baumann, Hart
Biophysical Chemistry II 4½ credits
(Prerequisite: Chemistry 113) A study of the bioenergetics, enzyme kinetics and cryobiochemistry as related to cellular phenomena. Laboratory work includes enzyme kinetics, energetics and special projects. 3 hours lecture and 3 hours laboratory.

CHEM. 115 Dr. Dreisbach
Introduction to Biochemistry I 3 credits
(Prerequisite: Chem. 102) An introduction to the study of biochemistry. A study of the chemical nature of lipids, carbohydrates, proteins, nucleic acids and enzymes including relationships between vitamins, hormones, and inorganic compounds. 3 hours lecture.

CHEM. 116 Dr. Dreisbach
Introduction to Biochemistry II 3 credits
(Prerequisite: Chem. 115) An introduction to the study of the metabolism, digestion, and absorption of carbohydrates, lipids, amino acids and proteins, including energy transformations and the role of the enzyme systems in the above processes. 3 hours lecture.

CHEM. 121 Drs. Wasilewski, Dreisbach
Biochemistry I 6 credits
(Pre or corequisite: Chemistry 102 and 113 or 123) Principles of biochemistry and biophysical chemistry including enzyme kinetics. A study of the chemical nature of lipids, carbohydrates, proteins, nucleic acids and enzymes including relationships between vitamins, hormones and inorganic compounds. 3 hours lecture and 6 hours lab. (Lab required of biochemistry majors.)

CHEM. 122 Drs. Wasilewski, Dreisbach
Biochemistry II 3 credits
(Prerequisite: Chemistry 121) A study of the metabolism, digestion and absorption of carbohydrates, lipids, amino acids and proteins, including energy transformations together with the role of enzyme systems in the above processes. 3 hours lecture.

CHEM. 123-124 Drs. Baumann, Hart
Physical Chemistry I-II 9 credits
(Prerequisite: Chem. 12, Math 22) A study of the physical chemical properties of matter and the dynamics of chemical reactions. Laboratory experiments illustrate the principles studied. 3 hours lecture and 3 hours laboratory each semester.

CHEM. 125 Drs. Vinson, Sherman
Instrumental Analysis 5 credits
(Prerequisite: Chem. 112 or 123) Instrumental methods of analysis consisting of theory and application of such instrumental techniques at spectroscopy, polargraphy and instrumental titrimetry. Laboratory stresses instrumental analysis and techniques. 2 hours lecture and 6 hours laboratory.

CHEM. 127 Dr. Cann
Chemical Literature and Writing 1 credit
A study of the published source material of chemical science and industry. The course includes practical instruction in library technique and in the written reporting of results. 1 hour lecture.

CHEM. 128 Staff
Seminar 1 credit
Current topics in chemistry, biochemistry, and industrial chemistry are prepared and presented by the students.

CHEM. 129 Drs. Baumann, Hart
Physical Chemistry III 3 credits
(Prerequisite: Chem. 124) Quantum mechanics and quantum chemistry, including classical problems, perturbational theory, variational theory and specific applications of molecular orbital theory to organic molecules and spectroscopic applications.

CHEM. 130 Dr. Marx
Inorganic Chemistry 3 credits
Descriptive chemistry of main group and selected transition elements and their compounds correlated with the periodic table, physical properties, atomic and molecular structure. 3 hours lecture.

CHEM. 131-132 Staff
Undergraduate Research 3 credits
(Prerequisites: Chem. 102, 113, or 123, 127) Individual study and research in connection with a specific chemistry or biochemistry problem. Results must be written as thesis and defended before the department. 1.5 credits each semester.

CHEM. 135 Dr. Marx
Advanced Inorganic Chemistry 4.5 credits
(Prerequisites: Chem. 123-124 or 113-114) Theoretical concepts and their application to the reactions and structure of inorganic compounds. Coordination chemistry and related topics, physical methods and reaction mechanisms. (3 hours lecture and 3 hours laboratory.)

CHEM. 149 Staff
Chemical Statistics 3 credits
(Prerequisite: Math 13) The practical objective of statistics and the analysis of scientific data. Emphasis is placed on those statistical techniques accepted by the major chemical journals. The recording, manipulating and summarizing of scientific data. 3 hours lecture.

C/LE 151 Staff
Forensic Chemistry 3 credits
(No prerequisite) Designed for law enforcement majors as well as science majors, this is a study of the rules of evidence and the position of the expert scientific witness in law, followed by a review of the uses of scientific, and particularly chemical, evidence in various phases of the investigation and trial of criminal actions. (Area 1).

CHEM. 152 Staff
Science and Society 3 credits
(No prerequisites) A study of some current problems of a scientific and technological nature from the point of view of the non-science major. Scientific background will be provided to lead to greater understanding and possible solutions. Possible topics: energy, genetic engineering, narcotics, pesticides, etc. 3 hours lecture. (GE Area I).

CHEM. 153 Staff
Chemical Toxicology 3 credits
(Prerequisites: Chem. 102) The nature, mode of action and methods of counteracting substances which have an adverse effect on biological systems, especially human. Medical, industrial, and environmental forensic aspects will be discussed. 3 hours lecture.

CHEM. 171 Dr. Dickneider
Industrial Chemistry
A review of chemical operations and unit or batch processes common to the industry. Econometric analysis involving supply-demand, productivity, commodity prices and costing is an important area covered. Measures of productivity and patent activity. 3 hours lecture.

CHEM. 177 Drs. Wasilewski, Dreisbach
Enzymology 3 credits
A course in the chemical nature of enzymes with relation to mechanism of enzyme action and kinetics, purification and identification of enzymes and isoenzymes. Biochemical and physiological aspects of enzymes in living systems. 3 hours lecture.

NSCI 103 Dr. Vinson
The Ascent of Man 3 credits
(GE Area I) Science and Technology from the ancient Greeks to the present will be discussed from the personal viewpoint of the scientists and inventors. Lectures will be supplemented with films from the Ascent of Man Series on PBS. 3 hours lecture.

COMMUNICATION

DR. SADOWSKI, *Chairperson*

The Department of Communication embraces the fields of broadcasting (radio and television), cable, film, journalism, advertising, public relations, and speech. Although the media are interrelated, students may concentrate in one of these fields. Some students, however, will seek a mixture or subspecialty which combines study in several communication areas. The Department will adapt each student's curriculum to his or her goals, and for this reason individual student advising by the communication faculty is a high priority.

Students who major in Communication become knowledgeable about the subject matter from both humanistic and scientific perspectives. They also have several opportunities to acquire on-the-job experiences through departmental internships, as well as individualized study available through faculty-directed projects and theses. A communication degree program prepares students for professional careers and advanced studies. In addition, courses are designed to serve students in other departments of the University by developing their oral and written communication skills.

A student wishing to earn a B.A. degree in Communication must satisfactorily complete a minimum of 36 semester hours from the Department of Communication course offerings. Included among these 36 hours are six core courses which are required for all Communication majors.

DEGREE OFFERINGS AND REQUIREMENTS

A minimum of 36 hours in Communication subjects, including the following six required core courses:

Comm	102	Human Communication
Comm	103	Logical and Rhetorical Analysis
Comm	120	Mass Communication
Comm	130	Responsibility in Communication
Comm	180	Mass Communication Law
Comm	190	Communication Theory and Research

Electives may be selected from the following courses without necessarily concentrating in one area:

Advertising/Public Relations

Comm	161	Advertising
Comm	162	Advertising Practicum
Comm	170	Organizational Communication
Comm	171	Public Relations
Comm	172	Promotional Writing

Broadcasting/Film

Comm	123	Mass Media Management
Comm	159	Documentary Film
Comm	160	Film and Culture
Comm	175	Cable Television
Comm	185	Film Theory

Communication Studies

Comm	112	Argumentation
Comm	150	Communication and Socialization
Comm	164	Political Communication
Comm	168	Broadcast Criticism

Journalism

Comm	152	Newswriting
Comm	153	Editing
Comm	156	Radio Journalism
Comm	157	Television Journalism

Radio/TV Production

Comm	131	Radio Programming and Production
Comm	132	Radio Practicum
Comm	141	Television Production
Comm	142	Educational Television
Comm	143	Advanced Television Production

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Comm. 102	Human Communication	3	
MAJOR	Comm. 120	Mass Communication		3
COGNATE	Engl. 7	Written Communication	3	
GE AREA IV	Humanities	Electives	3	6
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21-22	Theology I-II	3	3
GE AREA III	Comm. 2*	Fund. of Speech*		3
PHYS EDUC	Ph.Ed.	Phys. Educ.	1	1
			16	16
		SOPHOMORE		
MAJOR	Comm. 103	Logical & Rhetorical Analysis	3	
MAJOR	Comm. 130	Responsibility in Communication		3
MAJOR	Comm. Electives	Comm. Electives	3	3
GE AREA I	Nat.Sci./Quant.	Electives		3
GE AREA II	Soc./Behav.	Electives	3	3
GE AREA IV	Humanities	Elective	3	
GE AREA V	Phil. 110	Ethics	3	
GE AREA V	Phil.-T/RS	Elective		3
PHYS EDUC	Ph.Ed.	Phys. Educ.	1	1
			16	16
		JUNIOR		
MAJOR	Comm. 180	Mass Communication Law	3	
MAJOR	Comm. Electives	Comm. Electives	3	3
COGNATE	Electives	Electives	6	3
GE AREA I	Nat. Sci./Quant.	Elective	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil.-T/RS	Elective		3
			18	15
		SENIOR		
MAJOR	Comm. 190	Comm. Theory & Research	3	
MAJOR	Comm. Electives	Electives	3	3
COGNATE	Electives	Electives	6	6
GE FREE	Electives	Electives	3	6
			15	15
			TOTAL: 127 credits	

*If student is exempted, no credits are required in Area III; 3 credits are added to Free Area.

MINOR. A student wishing to minor in Communication must satisfactorily complete 18 hours to be selected with the approval of the Department Chair. Nine of these hours must come from the following three options:

1) either Comm 102 Human Communication
   or Comm 120 Mass Communication
2) either Comm 103 Logical and Rhetorical Analysis
   or Comm 130 Responsibility in Communication
3) either Comm 180 Mass Communication Law
   or Comm 190 Communication Theory and Research.

COMM. 2 Staff
Fundamentals of Speech 3 credits
This course is intended to be an introduction to the theory, composition, delivery, and criticism of speeches. Modes of speaking and speech types are studied, such as informative, persuasive, and expository addresses. This is a performance as well as a theory course which emphasizes both written and verbal skills. Successful completion of COMM 2 (with a grade of C or better) fulfills the speech skills requirement of the University.

COMM. 102 Staff
Human Communication 3 credits
An introduction to the theory, research, and practice associated with dyadic (one to one) and general intrapersonal and interpersonal communication behaviors and concepts. Both verbal and nonverbal communication techniques are studied.

COMM. 103 Staff
Logical and Rhetorical Analysis 3 credits
(Prerequisites: COMM. 102 & COMM. 120) A study of the principles of logic and persuasion, analysis of fallacies, and critical examination of the principles of structure in written and oral communication. Practice in briefs and abstracts with an emphasis on precision and clarity.

COMM. 112 Staff
Argumentation and Debate 3 credits
(formerly Media 112) This course concentrates on the techniques of argumentation, persuasion, debate, and forensics. Focuses heavily on research, case construction, and formal analysis.

COMM. 120 Staff
Mass Communication 3 credits
Historical survey of the nature, scope, and function of the print and electronic media in the United States. Economics, programming, and public control are some of the topics covered.

COMM. 123 Staff
Mass Media Management 3 credits
(formerly Media 123; Prerequisites: COMM. 120 or COMM. 130) The multifaceted roles of managers in the various communication industries are examined. Special attention is given to conceptual, technical, and humanistic concerns. Other areas of study include self-management, personnel, contracts, and media trade unions. Case studies.

COMM. 130 Staff
Responsibility in Communication 3 credits
(Prerequisites: COMM. 102 & COMM. 120) This course will consider the responsibilities of those in control of the mass media and the publics which are served. Different faculty may approach this course from various ethical, humanistic, behavioral, economic, social, educational, or political perspectives. Position paper required.

COMM. 131 Staff
Radio Programming and Production 3 credits
(formerly Media 131) An examination of the dynamic industry roles of the radio producer-director. Areas to be studied include audio theory, production techniques, radio station operations, promotion, sales, and formats.

COMM. 132 Staff
Radio Practicum 3 credits
(formerly Media 132; Prerequisite: COMM. 131) Building upon the foundation acquired in COMM. 131, students receive indepth instruction and practice in radio station procedures, equipment operation and maintenance, audio board work, and FCC broadcast regulations.

COMM. 141 Staff
Television Production 3 credits
(formerly Media 141) Designed to provide both theoretical background and practical application of television production in and outside the studio. Various format types, production techniques, and artistic styles are studied. Opportunity for producing and directing television programs.

COMM. 142 Staff
Educational Television 3 credits
(formerly Media 142) Instructional uses of the television medium by public television stations, schools, closed-circuit and cable systems. Types of educational programs are evaluated. Students work on preparing projects which may reflect their own pedagogical interests.

COMM. 143 Staff
Advanced Television Production 3 credits
(formerly Media 143; Prerequisite: COMM. 141) Building upon the foundation acquired in COMM. 141, students pursue specialized projects in producing and directing programs for broadcast or cable distribution.

COMM. 150 Staff
Communication and Socialization 3 credits
Study of the interactive impact of mass media upon society and society upon mass media. Topics include children and television, media violence, political campaigns, diffusion innovations, and social learning.

COMM. 152 Staff
Newswriting 3 credits
(formerly Media 152) Evaluating news, reporting and writing stories. Newsroom organization. Style and usage. Interviewing, feature writing. Students work at terminals. Typing ability needed.

COMM. 153 Staff
Editing 3 credits
(formerly Media 153: Prerequisite: COMM. 152) Preparing copy for publication. Correcting, improving and trimming stories. Headline writing, layout, graphics. Wire services, printing processs. Students work at terminals.

COMM. 156 Staff
Radio Journalism 3 credits
(formerly Media 156; Prerequisite: COMM. 152 or COMM. 153) Interviewing and investigative reporting styles are analyzed and used in preparing news and documentary-style scripts for broadcast.

COMM. 157 Staff
Television Journalism 3 credits
(formerly Media 157; Prerequisite: COMM. 152 or COMM. 153) Broadcast journalism skills are refined through classroom and outside assignments. Production techniques, including tape editing, are explored. Television news formats are produced.

COMM. 159 Staff
Documentary Film 3 credits
Growth, implication, and use of the domestic and foreign nonfiction film as propaganda, public service, promotion, education, entertainment, and art. Screening and written critiques of selected films.

COMM. 160 Staff
Film and Culture 3 credits
This course will investigate how the motion picture not only depicts but also shapes the culture of a society. Through screening and written critiques of selected domestic and foreign films, students will discover how filmmakers influence audiences through their use of content, editing, *mise-en-scene,* and production techniques.

COMM. 161 Staff
Advertising 3 credits
(formerly Media 161) This course explores advertising as an institution in society, utilizing research, media planning, and creative strategies. Students will participate in the formulation of an advertising campaign plan for local businesses.

COMM. 162 Staff
Advertising Practicum 3 credits
(formerly Media 162; Prerequisite: COMM. 161) Building upon the foundation acquired in COMM. 161, this course provides students with real-life experiences associated with operating a full-service advertising agency. The agency provides clients with a complete array of services ranging from campaign creation to implementation and evaluation.

COMM. 164 Staff
Political Communication 3 credits
Critical examination of rhetorical strategies used in twentieth century political campaigning. Case studies and student projects focus on the special uses of broadcast and print media in political advertising.

COMM. 168 Staff
Broadcast Criticism 3 credits
Analysis of radio and television programs and promotional strategies, including formats, scripts, talent, commercials, public service announcements, positioning, ratings, and network-affiliate relationships.

COMM. 170 Staff
Organizational Communication 3 credits
The study of communication behaviors, patterns, and strategies in organizations. Topics include power and politics, organizational cultures, human resources, conflict management, and negotiation. Historical and contemporary theories of organizing are examined and critiqued from a communication perspective.

COMM. 171 Staff
Public Relations 3 credits
(formerly Media 171) Analysis of contemporary communication strategies used in creating public images for organizations, both small and large, public and private.

COMM. 172 Staff
Promotional Writing 3 credits
(formerly Media 172; Prerequisite: COMM. 152 and COMM. 153) The study of written communication used in advertising and public relation efforts. Examples of print and broadcast media are examined. Student writing assignments are critiqued in class on a regular basis.

COMM. 175 Staff
Cable Television 3 credits
A study of cable television and its development and current place in the telecommunications industry. Topics include programming strategies, formats, multiple system operators, independents, syndication, sales, satellite services, pay-per-view, audience ratings, management, and the franchising process. Students develop their own research proposals for establishing new cable channels, networks, and services.

COMM. 180 Staff
Mass Communication Law 3 credits
(formerly Media 122; Prerequisites: COMM. 103 & COMM. 130) Analysis and examination of statutory laws, congressional legislation, and federal rules and regulations governing the mass media in the United States. Focus on the First Amendment, libel and slander, privacy, copyright, free press/fair trial obscenity, advertising, antitrust and monopoly, taxation, and licensing.

COMM. 185 Staff
Film Theory 3 credits
(Prerequisite: COMM. 159 or COMM. 160) Critical examination of the major theoretical positions on and dimensions of the motion picture as a distinct art form. The writings of Eisenstein, Arnheim, Kracauer, and others will be studied. Screenings and research paper.

COMM. 190 Staff
Communication Theory and Research 3 credits
(Prerequisites: COMM. 103 & COMM. 130) Critical study and analysis of various theoretical models of communication, behavioral science theories, and communicaton research paradigms. Topics include information theory, scientific method, balance and congruity theories, cognitive dissonance, perception, attitude change, semantic differential, group dynamics, and persuasion. Empirical research proposals are required which students may later develop into senior theses.

COMM. 191 Staff
Special Topics 3 credits
In-depth departmental seminars on selected communication topics meeting the needs and interests of students. Topics vary from semester to semester.

COMM. 195 Staff
Directed Independent Study 3 credits
(Prerequisite: Senior Standing) In consultation with the student's advisor and department chair, the communication senior undertakes a significant area of study resulting in a major research paper. Students select a communication professor whom they wish to direct the study. Usually taken to augment an area of the student's interest not substantially covered in available departmental courses.

COMM. 197 Staff
Internship 3 credits
(formerly Media 198; Prerequisite: Junior or Senior standing and appropriate course work) A practicum or on-the-job experience under guidance of practitioners in the communication field. To be supervised individually by a department faculty member in consultation with the student's advisor and department chair. May be repeated for up to a maximum of six credits. (Internship credits cannot be used to fulfill requirements in the COMM major or Cognate; they can be used in the Free Area.)

COMM. 198 Staff
Senior Project 3 credits
In consultation with the student's advisor and department chair, the communication senior undertakes a significant area of study resulting in a broadcast-quality videotape or audiotape suitable for airing by commercial or noncommerical television stations, radio stations, or cable systems. Students select a communication professor whom they wish to supervise the project.

COMM. 199 Staff
Senior Thesis 3 credits
(formerly COMM. 110; Prerequisites: COMM. 180 & COMM. 190) An optional research-based written project in which the serious communication senior, in consultation with the student's advisor and department chair, selects an issue or problem for scholarly study, undertakes significant and meaningful research, and produces a major paper of publishable quality. Students select a communication professor whom they wish to direct their thesis. Strongly recommended for students who plan to attend graduate school.

COMMUNICATION ELECTIVES FOR AREA III OF GENERAL EDUCATION PROGRAM

Elementary, Intermediate and Advanced Languages

CMPS. 20, 21, 24, and 25.
EDUC. 103-104, 107
PHIL. 28 Logic

ART 60-62 Design
ART 64 Drawing
ART 150-154 Painting

ENGL. 7 Composition
ENGL. 9 Scientific Writing
ENGL. 112 Advanced Composition
ENGL. 124 Creative Writing
ENGL. 125 Strategies for Teaching Writing
ENGL. 127 Teaching Modern Grammars

COMM. 2 Fundamentals of Speech
COMM. 103 Logical and Rhetorical Analysis
COMM. 112 Argumentation and Debate
COMM. 131 Radio Programming and Production
COMM. 132 Radio Practicum
COMM. 141 Television Production
COMM. 142 Educational Television
COMM. 143 Advanced Television Production
COMM. 152 Newswriting
COMM. 153 Editing
COMM. 156 Radio Journalism
COMM. 157 Television Journalism

COMPUTER SCIENCE

DR. BEIDLER, *Chairperson*

The University of Scranton's bachelor of science program in computer science dates from 1970 — one of the oldest in the Commonwealth of Pennsylvania. The Computer Science Major provides an integrated introduction to Software Engineering along with the Mathematical skills needed in Computer Science. The program culminates in the senior year with the Computer Projects course. Research and internship opportunities are available.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	CMPS 24-25	Computer Sci I-II	3	4
COGNATE	Math 10-11	Discrete Math I-II	3	3
GE AREA III	Comm	Electives[1]	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil 20	Intro. To Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph Ed	Physical Education	1	1
			16	17
		SOPHOMORE		
MAJOR	CMPS 110-100	Data Structure — Mach Org	3	3
COGNATE	Math 14-21	Calculus I-II	4	4
COGNATE	Phys 11-12	Elements of Physics I-II	4	4
GE AREA III	Engl 9	Scientific Writing	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS 22	Theology II		3
PHYS EDUC	Ph Ed	Physical Ed	1	1
			18	18
		JUNIOR		
MAJOR	CMPS 101-150	Operating Sys-Prog Lang	3	3
MAJOR	CMPS 140	File Processing	4	
MAJOR	CMPS 145	Computer Architecture	3	
MAJOR	CMPS	Electives*		6
GE AREA II	Soc/Behavior[2]	Electives	6	6
GE AREA V	Phil 110	Ethics	3	
GE FREE	Elective	Elective		3
			19	18
		SENIOR		
MAJOR	CMPS 120	Computer Projects	3	
MAJOR	CMPS	Electives*	3	3
COGNATE	Elective	Elective		3
COGNATE	Math 102-104	Probability-Statistics	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil-T/RS	Elective/PHIL 135	3	3
GE FREE	Elective	Elective		3
			15	18
			TOTAL 139 CREDITS	

*The four electives in the major must be chosen from CMPS 112, 125, 130, 133, 142, 152, 160, 180, 193, and 195.

COGNATE — Senior year elective should be a science or mathematics course at the 100 level or above.

[1] Communication 2 (Oral Communication) and English 7 (Composition) are required except for students who are certified as meeting the Communications Skills requirement.

[2] Economics 11-12 (Principles of Economics) and Psychology 23 (Fundamentals of Psychology) are required.

MINOR. The Minor in Computer Science must include CMPS 24, 25, and 110 and any three of the courses CMPS 100, 101, 112, 125, 133, 145, 150, 152, or 160.

INFORMATION SYSTEMS

This program investigates the analysis, design, development, implementation, evaluation and effective use of computer information systems in organizations. Since business and government are principal users of computers, Information Systems majors will select cognates from the School of Management or from the Public Administration Program. This major is enhanced by the Computer Systems Intern Program in Pennsylvania State Government. Students are encouraged to participate in this or another internship.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	CMPS 24-25	Computer Science I-II	3	4
COGNATE	Math 10-11	Discrete Math I-II	3	3
GE AREA III	Communications	Electives*	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph Ed	Physical Education	1	1
			16	17
		SOPHOMORE		
MAJOR	CMPS 110-100	Data Structures—Mach Org	3	3
COGNATE	Acc 1-2	Financial Accounting I-II	3	3
COGNATE	Math 14-44	Calculus I-Statistics	4	3
GE AREA II	Econ 11-12 or Pol Sci 5-6**	Econ. or Pub. Admin.	3	3
GE AREA IV	Humanities	Electives	3	3
PHYS EDUC	Ph Ed	Physical Education	1	1
			17	16
		JUNIOR		
MAJOR	CMPS 127-138	Information System—Analysis	3	3
MAJOR	CMPS 140-142	File Processing-Database	4	3
MAJOR	CMPS 101-Elect	Operating Systems-Elective	3	3
COGNATE	Elective	Elective	3	
GE AREA III	Engl 9	Tech & Business Writing		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil 110-T/RS 22	Ethics-Theology II	3	3
			19	18
		SENIOR		
MAJOR	CMPS 120	Computer Projects	3	
MAJOR	CMPS	Electives		6
COGNATE	Electives	Electives	3	3
GE AREA II	Soc/Behavioral	Electives	3	3
GE AREA V	Phil-T/RS	Elective/Phil 133 or 135	3	3
GE FREE	Electives	Electives	3	3
			15	18
			TOTAL 136 CREDITS	

Elective courses in the Information Systems major must be CMPS courses numbered 100 or higher.

* Communication 2 (Oral Communication) and English 7 (Composition) are required except for students who are certified as meeting the Communications Skills requirement.

** Pol Sci 5-6 should be taken if a student anticipates applying for the Computer Science Intern Program (CMPS 199). Such students should reserve the senior year Area II electives to be taken in conjunction with the Internship. Otherwise, Psych 23 is required.

School of Management Cognates—Mgt 108 and QMS 109 are required. Select one from the following: Acc 115 or 121, Fin 110, Mkt 107, Mgt 116, 140, 143, Qms 115 or 151.

Public Administration Cognates—Select three from the following: Pol Sci 105, 106, 112, 183, or 186.

MINOR. The Minor in Information Systems must include CMPS 24, 25, 127, and 140, and any two of CMPS 110, 138, or 142.

CMPS. 1 Computer Lab Fee.
Computer Literacy 3 credits
This course is designed for non-science majors who wish to learn to use computing in several ways that do not involve programming. Students learn the fundamentals of using an editor, text processor, electronic spreadsheet, statistical and graphics software. (GE AREA I)

CMPS. 20 Computer Lab Fee
FORTRAN 77 3 credits
An introduction to programming using FORTRAN 77. Applications from mathematics and the natural sciences are emphasized. (GE AREA III)

CMPS. 21 Computer Lab Fee.
Computing for Business & Social Sciences 3 credits
An introduction to computing, emphasizing problem solving concepts and the use of software packages. Emphasis is on the use of word processing, electronic spreadsheets, statistical packages, graphics and database software, as well as developing a concern for societal issues. (GE AREA III)

CMPS. 24 Computer Lab Fee.
Computer Science I 3 credits
An introduction to programming concepts and methodology using the programming language Pascal. The course emphasizes a structured programming approach. Topics included are problem analysis, modularization, top-down design, and the elements of the programming language, Pascal. Prerequisite or corequisite: MATH 10 or MATH 12.

CMPS. 25 Computer Lab Fee.
Computer Science II 4 credits
A sequel to CMPS 24, continuing the development of structured programming concepts using the programming language Modula-2. The course emphasizes the use of data structures and modular programming. Prerequisite: CMPS 24 and prerequisite or corequisite: MATH 11 or MATH 14.

CMPS. 40 Computer Lab Fee.
COBOL Programming 3 credits
An introduction to ANSI standard COBOL. Traditional business applications will be emphasized. Topics include internal data representation, data editing, calculations, one-level tables, search, sort, and reporting. Prerequisite: Previous use of a computer (GE AREA III)

CMPS. 100 Computer Lab Fee
Machine Organization and Assembly Language Programming 3 credits
An introduction to machine organization and architecture. Among the topics discussed will be machine organization, assembler programming, the representation of data, the assembler, input-output routines and the use of macros. Prerequisite: CMPS 25 and (MATH 11 or MATH 21).

CMPS. 101 Computer Use Fee.
Operating Systems 3 credits
The analysis and design of computer systems, including operating system design, memory management, scheduling, and the implementation of multiprogramming. Prerequisite: CMPS 100 and CMPS 110.

CMPS. 110 Computer Lab Fee.
Data Structures 3 credits
The representation and transformation of information. This course stresses the interrelation between data structure and program structure and the analysis of algorithms for efficiency. Prerequisites: CMPS 25 and either MATH 11 or MATH 21.

CMPS 112 No Computer Fee
Analysis of Algorithms 3 credits
An investigation of algorithms and computibility. Classic algorithms for sorting and graph theory as well as examples from current literature are examined. Computibility, decidability, completeness, do-ability are possible additional topics. Prerequisite: CMPS 110

CMPS. 120 No Computer Fee.
Computer Projects 3 credits
In this course students prepare and present individual computer projects to be evaluated by the instructor and their fellow students. Seniors only.

CMPS. 125 Computer Use Fee.
Artificial Intelligence 3 credits
Problem solving using Expert Systems, heuristic programming techniques, tree speed-up techniques, and learning mechanisms. Prerequisite: CMPS 110.

CMPS. 127 Computer Use Fee.
Information Systems Analysis 3 credits
Introduction to concepts and practices of information processing. Computerized system requirements and techniques in providing appropriate decision-making information to management. Prerequisite: CMPS 20 or CMPS 21 or CMPS 24.

CMPS. 130 Computer Use Fee.
Numerical Analysis 3 credits
A survey of computer-oriented techniques for integration, differentiation, matrix computation, solution of simultaneous equations, and analysis of errors. Prerequisite: CMPS 24 and MATH 22.

CMPS. 133 Computer Use Fee.
Computer Graphics 3 credits
Introduction to equipment and techniques used to generate graphical representations by computer. Description and use of vector-refresh, vector-storage, and raster-scan graphics plotter and CRT pseudo-graphics. Prerequisite: CMPS 110.

CMPS. 138 No Computer Fee.
Systems Analysis and Design 3 credits
A study of the system development methodology and the role played by the systems analyst in developing user-accepted information system. Prerequisite: CMPS 127.

CMPS 140 Computer Lab Fee.
File Processing 4 credits
File processing concepts and applications using COBOL as an implementation language. Topics include: tables; sorting; searching; creation, maintenance, and reporting of sequential, relative, and indexed file structures. Projects require the use of CASE tools for design and documentation. Pre. CMPS 25 or equivalent.

CMPS. 142 Computer Use Fee.
Database Systems 3 credits
An introduction to database management systems, DBMS, with an emphasis on relational database design and applications. The primary software used is dBASE III PLUS and ORACLE DBMS. Pre: CMPS 127 or CMPS 110.

CMPS. 145 Computer Use Fee.
Computer Architecture 3 credits
Processor/memory/switch and instruction set processor/register transfer level; digital logic design. Prerequisite: CMPS 100.

CMPS. 150 Computer Use Fee.
Programming Languages 3 credits
Practical and theoretical aspects of programming languages, compilers, and interpreters. Prerequisite: CMPS 101.

CMPS. 152 Computer Use Fee.
Compiler Design 3 credits
Study of techniques and problems involved in constructing compilers. Lexical analysis, syntax analysis, semantic analysis, symbol table management, code generation, code optimization. Prerequisite: CMPS 150.

CMPS. 160 No Computer Fee.
Theory of Computation 3 credits
The development of a theoretical notion of computibility and its relationship to Turing computibility and recursive functions; the study of the relationships between automata, formal languages, and grammars. Prerequisite: CMPS 110.

CMPS 180 Fee TBA.
Special Topics 3 credits each
Topics and prerequisites will be announced prior to preregistration.

CMPS 193 Fee TBA.
Computer Research 3 credits
A research project carried out by a student under the direction of a faculty member in the department. The results will be prepared in a form suitable for publication. Departmental permission required. Reader fee.

CMPS 195 No Computer Fee.
Computer Internship 3 credits
An intensive job experience in computing which carries academic credit. Prior approval is required and an information booklet is available from the department. Reader fee.

CMPS 199 No Computer Fee.
CSIP Internship 3 credits
A six-month job experience in computing in a Pennsylvania State Government Agency. Applications are accepted during the Fall of the student's junior year. See Mr. Taylor for information.

CRIMINAL JUSTICE

DR. RIELLY, *Chairperson*

The BS Degree program in Criminal Justice has the following objectives: 1. to prepare students for careers in law enforcement at the local, state or federal levels (FBI, Departments of Defense, Treasury, Justice); 2. to prepare students for careers in the field of correction and rehabilitation: parole, prisons, juvenile delinquency, etc.; 3. to provide students with academic preparation for advanced study in law, criminology, public administration and related fields. The Criminal Justice major is administered by the Department of Sociology/Criminal Justice, which also administers the Sociology and Gerontology degree programs.

An Advisory Board of Community leaders working in the field of law enforcement and criminal justice has been established to work with University officials and faculty in the areas of curriculum and internships.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Soc. 21—CJ20	Principles of Sociology—Intro. to Criminal Justice	3	3
COGNATE	Psych. 23	Fundamentals of Psychology	3	
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	S/CJ 123-S/CJ 112	Law and Society—Criminal Research	3	3
MAJOR	S/CJ 103-113	Criminology—Juvenile Delinquency	3	3
COGNATE	Pol. Sci. 101	American National Government	3	
COGNATE	Psych. 126	Personality		3
GE AREA III	Elective	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics		3
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	CJ Elec.	Criminal Justice Electives	3	3
COGNATE	Pol. Sci. Elec.	Political Science Electives	3	3
COGNATE	Soc. Sci. Elec.	Social Science Electives	3	3
GE AREA I	Acc. 3-4*	Financial—Managerial Accounting	3	3
GE AREA IV	Humanities	Elective	3	
GE AREA V	T/RS 22	Theology II		3
GE FREE	Elective	Elective	3	
			18	15
		SENIOR		
MAJOR	CJ Elec.	Criminal Justice Electives	3	3
MAJOR	CJ 198-99 Elec.	Practicum/Electives	3	3
COGNATE	Soc. Sci. Elec.	Social Science Elective	3	
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil.—T/RS	Philosophy and/or Religious Studies	3	3
GE FREE	Electives	Electives	3	3
			15	15

TOTAL: 127 CREDITS

*Department Recommendation.

General Education Recommendations:

In GE AREA I, the department recommends 12 credits of accounting for those contemplating FBI service; otherwise, C/LE 151, Forensic Chemistry. In GE AREA III, CMPS 21 is highly recommended and Engl. 12, Writing for Law. If the student has not otherwise satisfied the University's proficiency requirements, Engl. 7 and Comm. 2 must be taken. In GE AREA IV, the department recommends Hist. 1-2, History of the U.S.; H/PS 124-25, American Political and Social Thought; Engl. 164, Black Literature. In GE AREA V, T/RS 163, Church and Contemporary Social Issues.

In the COGNATE, the department recommends Pol. Sci. 105, State Government; Pol. Sci. 106, Local Government; Pol. Sci. 127, American Intergovernmental Relations; Psych. 145, Abnormal Psychology; Soc. 106. Community Organizations; Soc. 107, Child Welfare; Soc. 111, Urban Sociology; Soc. 114, American Minority Groups.

MINOR. A minor in Criminal Justice will require eighteen credits. There are three required courses: Soc. 21: Principles of Sociology; CJ 20: Introduction to Criminal Justice; and S/CJ 103: Criminology. The following elective courses are strongly recommended by the department in the criminal justice sequence: CJ 112: Criminologial Research; S/CJ 113: Juvenile Delinquency; S/CJ 123: Law and Society; and CJ 126: Criminal Law.

CJ. 20 Profs. Friedrichs, Baker
Introduction to Criminal Justice 3 credits
A foundation course examining problems in the study of crime and criminal justice, basic elements of criminal law and constitutional rights, and the functions of, as well as the relationship between, major components of the criminal justice system; agencies and role of law enforcement; prosecution; the judicial process, and corrections.

S/CJ. 103 Dr. Rielly
Criminology 3 credits
Crime as a form of deviant behavior; nature and extent of crime; past and present theories; evaluation of prevention, control and treatment programs.

S/CJ. 104 Prof. Friedrichs
Victimology 3 credits
An examination of the causes and consequences of crime victimization. The recent emergence of the study of the victim, the types and circumstances of victimization, and the nature of the criminal justice system's response to crime victims are considered, along with the ethical and practical dimensions of crime victimization.

S/CJ. 112 Dr. Rielly
Criminological Research 3 credits
Survey of methods and techniques for achieving interpretable results in research in the criminal justice field; research design; data collection.

S/CJ. 113 Dr. Rielly
Juvenile Delinquency 3 credits
Nature and extent of delinquency: competing explanatory models and theories; evaluation of prevention, control, and treatment programs.

S/CJ. 115 Prof. Baker
Organized Crime Patterns 3 credits
The national and international organizational structure of organized crime will be analyzed. Primary attention will be given to comparative theories and concepts. The various methods of prosecution, investigation, and control will be discussed.

S/CJ. 116 Prof. Friedrichs
White Collar Crime 3 credits
A study of white collar crime, including corporate misdeeds, political corruption, occupational illegalities and upperworld deviance. This course will explore the causes, consequences, and criminal justice system reponse to white collar crime.

S/CJ. 117 Porf. Friedrichs
Sociology of Deviance 3 credits
Critical examination of theories and empirical studies of social deviance, focusing upon the formulation and application of deviant labels, organizations relating to deviance, and deviant behavioral patterns. Special attention given to non-criminal forms of deviance.

S/CJ. 122 Staff
Special Topics in Criminal Justice 3 credits
Courses designed to meet specific needs of groups of students or courses offered on trial basis to determine the value of placing them into regular curriculum.

S/CJ. 123 Prof. Friedrichs, Dr. Talamini
Law and Society 3 credits
The relationship between law and society, or the interaction of legal and social variables. Examines jurisprudential and social theories of law; types of legal systems; ideology and legitimacy of law; development of law; the role of the legal profession; legal behavior and decision-making; and law and social change.

CJ. 124 Prof. Baker
The Investigative Process 3 credits
This course considers appropriate investigative procedures concerning major criminal investigations. An analysis of specific investigative theories and courtroom applications will be conducted through learning simulation. The homicide court problem will focus on the preservation and admission of evidence.

CJ. 125 Atty. Cimini
Criminal Justice Process 3 credits
A study of the law of criminal procedure, treating investigation and police practices, preliminary proceedings, and trial, as they relate to the development and structure of the American criminal justice system and as they affect offenders.

CJ. 126 Atty. Cimini
Criminal Law 3 credits
A study of substantive criminal law in view of its historical foundations, purpose, functions and limits; of crime and defenses generally; and of the elements which constitute certain specific crimes under state and federal statues.

S/CJ. 127 Staff
Probation and Parole 3 credits
Examination of community treatment in the correctional process; contemporary usage of presentence investigation, selection, supervision, release of probationers and parolees.

S/CJ. 128 Atty. Cimini, Dr. Rielly
Penology: The American Correctional System 3 credits
Analysis and evaluation of contemporary correctional systems; theories of punishment; discussion of recent research concerning the correctional institution and the various field services; the history of corrections in Pennsylvania.

S/CJ. 129 Prof. Baker
Criminal Justice Management 3 credits
Basic principles and practices of administration and their application to law enforcement. Relationship of theoretical administrative concepts and practical police problems.

S/CJ. 132 Atty. Cimini
The American Court System 3 credits
The court as a key component of the criminal justice system is examined. Philosophical, historical, comparative and typological perspectives are reviewed; the organization, structure and procedures of the court are analyzed, and roles of the major courtroom participants are explored. Court administration, planning and reform.

S/CJ. 133 Atty. Cimini
Principles of Evidence 3 credits
An examination of the law of evidence as it pertains to the trial of a criminal case. A discussion of the common law, pertinent statutes, judicial opinions, and rules such as the federal rules of evidence, as these relate to such concepts as direct and circumstantial evidence; opinion testimony, experts and exhibits; competence, relevance and materiality; privileges, hearsay and its exceptions.

S/CJ. 134 Atty. Cimini
Trail, Jury and Counsel 3 credits
A consideration of the rights guaranteed by the Sixth Amendment to the Constitution of the United States, surveying consitutional provisions, statutes, court rules and cases concerning the right of a criminal defendant to a speedy and public trial, to trial by jury, and to the assistance of counsel.

S/CJ. 135 Atty. Cimini
The Bill of Rights & C.J. 3 credits
From the perspective of the criminal justice professional, this course addresses key principles enunciated in the first, fourth, fifth, sixth, eighth and fourteenth amendments to the Constitution of the United States.

CJ. 140 Prof. Baker
Crime Prevention 3 credits
This course analyzes the basic theories of crime prevention and will examine current developments in risk management and loss prevention. A review of crime prevention concepts utilized in the public and private sectors will focus on programs involving citizens, community and agency interrelationships.

S/CJ 142 Prof. Baker
Public Safety Administration 3 credits
An overview of the public safety field—its philosophy, disciplines and research. The course will focus on an examination of the police and governmental responses to disaster and accidents. A primary emphasis will be given to the various analytical approaches to the study of terrorism. Methods of planning, investigation and prevention will be discussed.

S/CJ. 145 Atty. Cimini
Civil Liability 3 credits
An examination of the law enforcement officer or employee as a defendant in a civil suit arising from the scope of his employment. Liability based upon rights statutes is examined, along with a consideration of the typical defenses.

S/CJ. 146 Prof. Baker
Recreational Leadership 3 credits
This course is an analysis of the leadership process in the field of recreation. It takes a broad view of leadership as encompassing all those processes utilized by recreational personnel that are intended to facilitate change and influence behavior. The course will focus on instructional and conceptual issues.

CJ. 191-192 Staff
Independent Study in Criminal Justice 3 credits
Directed projects and surveys in criminal justice, law enforcement, and corrections designed to give the student academic flexibility. Prerequisite: consent of the Chairman and the Instructor.

CJ. 198-199 Prof. Baker, Dr. Rielly
Field Practicum Experience 3 credits
Supervised field work in an approved criminal justice setting taken preferably in junior and senior year.

ELECTRONICS ENGINEERING

DR. VanGELDER, *Director*

Engineering is the profession in which a knowledge of the mathematical and natural sciences gained by study, experience, and practice is applied with judgment to develop ways to utilize, economically, the materials and forces of nature for the benefit of mankind. The Electronics Engineering major of the Department of Physics/EE prepares the student for the analysis and design of electronic devices whose principal functions are the shaping and control of information.

The office of career services reports that last year electronics engineers were offered the highest starting salaries of all University of Scranton graduates.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
COGNATE	Phys. 11-12	Elements of Physics I-II	4	4
COGNATE	Math 14-21	Analysis I-II	4	4
GE AREA III	CMPS. 24	Intro. to Computer Sci.	3	
GE AREA III	Communications	Electives*	3	3
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph.Ed.	Physical Education	1	
			18	17
		SOPHOMORE		
MAJOR	EE 30	Intro. Digital Logic	3	
COGNATE	Phys. 21	Modern Physics	4	
MAJOR	Engr. 32	Intro. C.A.D.	1	
MAJOR	Engr. 33	Intro. Mech. Design		1
MAJOR	EE 24	Circuit Analysis I		4
MAJOR	Engr. 21-23	Statics—Solid State Materials	3	3
COGNATE	Math. 22-101	Analysis III—Diff. Equations	4	4
COGNATE	Chem. 11-12	Genral Analytical Chemistry	3	3
GE AREA I	Humanities	Elective		3
			18	18
		JUNIOR		
MAJOR	EE. 104-105	Elect. and Magn. I-II	3	4
MAJOR	EE. 106-107	Elect. Principles & Circuits I-II	5	5
MAJOR	EE. 112	Electronic Instrument Design		5
COGNATE	Phys. 118	Mathematical Physics I	4	
GE AREA II	Econ. 101	Essent. Econ. Theory		3
GE AREA IV	Humanities	Elective	3	
GE AREA V	Phil. 110	Ethics	3	
			18	17
		SENIOR		
MAJOR	EE. 115	Digital Filter Design		3
MAJOR	EE. 108	Large Scale Integration Devices	3	2
MAJOR	EE. 109	Communications Engineering	3	
MAJOR	Elective	Electronics Design Project or Physics Electives	3	
MAJOR	EE. 120	Control Theory		3
MAJOR	EE. 110**-111	Digital Interface	4	2
GE AREA II	Social/Behavioral	Electives	3	3
GE AREA IV	Humanities	Elective		3
GE AREA V	T/RS 22-Phil. T/RS	Theology II-Elective	3	3
			19	19

TOTAL: 144 CREDITS

*In Freshman year, for GE AREA III (Communications), the Department recommends Engl. 7 and Com. 2, in addition to CMPS. 24.

**EE 110 is offered both in the Fall and during Intersession.

ELECTRONICS-BUSINESS

The state of the business world today is such that a major portion of its administrative effort must be geared to the supervision of persons engaged in complex technological processes often involving applications of electronics. As a consequence, the ideal administrator is now one who is conversant with both good business practice and technological know-how.

The Electronics-Business major provides a student with a progam of carefully selected business and economics courses coupled with a series of coordinated physics and electronics engineering courses so as to provide preparation for an administrative career in an electronically oriented business enterprise. The program also provides sufficient preparation for further studies leading to either the Master of Science in Solid State Electronics or the Master's in Business Administration.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
COGNATE	Phys. 11-12	Elements of Physics	4	4
	Math. 13-14 or	Pre-Calculus Math.-Analysis I or		
	Math. 14-21	Analysis I-II	4	4
GE AREA II	Econ. 11-12	Principles of Economics I-II	3	3
GE AREA III	Cmps. 24	Intro. to Computer Sci.		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA III	Communications	Electives**	3	3
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			18	18
		SOPHOMORE		
MAJOR	EE. 30	Intro. to Digital Logic	3	
	Acc. 3-4	Basic Financial, Managerial Acct.	3	3
	Engr. 23	Solid State Material Science		3
	Engr. 32	Intro. to C.A.D.	1	
	Engr. 33	Intro. to Mech. Design		1
	EE. 24	Circuit Analysis I		4
COGNATE	Math. 21-22 or	Analysis II-III or		
	Math. 22-101	Analysis III-Diff. Equations	4	4
	Phys. 21	Elements of Modern Physics	4	
GE AREA V/IV	T/RS. 21/Elec	Theology I/GE IV Elec.	3	3
			18	18
		JUNIOR		
MAJOR	EE. 106-112	Discrete Elec. Dev., Elec. Inst. Design	5	5
	QMS. 15-16	Statistics for Business I, II	3	3
GE AREA II	Soc./Behavior	Elective		3
GE AREA IV	Humanities	Electives	6	
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS 22	Theology II	3	
GE FREE	Elective	Elective		3
			17	17
		SENIOR		
MAJOR	Mgt. 108-Mkt. 107	Organization & Management-Managerial Marketing	3	3
	Fin. 110-QMS. 115	Corporation Finance - Production and Operations Management	3	3
	QMS. 109	Intro. to Management Science	3	
GE AREA II	Social Science	Elective	3	
GE AREA IV	Humanities	Electives	3	6
GE AREA V	Phil-T/RS	Electives	3	3
			18	15

TOTAL: 139 CREDITS

** Comm. 2 & Engl. 7 are recommended.

PRE-ENGINEERING

The University also provides a pre-engineering program which introduces the student to the highly technical training necessary for all phases of the engineering profession. This is a two-year course which enables the student to transfer to an engineering school to complete his degree work. Dr. Anthony DiStefano serves as advisor to pre-engineering students.

Of special importance is the University of Scranton's association with the Cooperative Engineering Program at the University of Detroit, and its programs in chemical, civil, electrical, environmental, and mechanical engineering. For the student who has completed the pre-engineering curriculum at the University of Scranton, the Detroit three-year cooperative program offers alternate semesters of formal instruction and work experience in industry. A direct transfer program is available with Widener College, which may be either a Co-op program beginning in the summer preceding the Junior Year or a regular two-year program.

Other engineering schools into which University of Scranton students transfer include Lehigh, Bucknell, Penn State and Drexel, among others.

In addition to the valuable experience gained from industry, many students have been able to pay the cost of their tuition from the remuneration received for their work. This amounts to a substantial equivalent scholarship grant.

ENGINEERING TRANSFER PROGRAM

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FRESHMAN		
MAJOR	Phys. 11-12	Elements of Physics I-II	4	4
COGNATE	CMPS 24	Computer Science	3	
COGNATE	Math. 14-21	Analysis I-II	4	4
GE AREA III	Communications	Elective*	3	
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
GE AREA II or IV	Elective	Humanities or Social Science Elective		3
PHYS EDUC	Ph.Ed.	Physical Education	1	
			18	17
		SOPHOMORE		
MAJOR	EE 24	Circuit Analysis		4
MAJOR	Engr. 21-23	Statics—Solid State Materials	3	3
COGNATE	Phys. 21	Elements of Modern Physics	4	
COGNATE	Math. 22-101	Analysis III—Diff. Equations	4	4
COGNATE	Chem. 11-12	General and Analytical Chemistry	3	3
GE FREE	Elective	Elective		3
MAJOR	Engr. 32	Intro. C.A.D.	1	
MAJOR	Engr. 33	Intro. Mech. Design		1
MAJOR	EE 30	Intro. to Digital Logic	3	
			18	18

TOTAL: 71 credits

* The Department recommends Engl 7, Composition, or if exempt, Engl. 9, Scientific Writing.

ENGR. 21 Staff
Engineering Mechanics-Statics 3 credits
(Prerequisite: Physics 11; Corerequisite: Math 21) Various types of force systems; resultants and conditions of equilibrium; stress analysis of the parts of different types of structures by graphical, algebraic and vector methods; frictional forces; centroids, and second moments of areas and solids.

ENGR. 22 Staff
Engineering Mechanics-Dynamics 3 credits
(Prerequisite: Engineering 21; Corequisite: Math 22) Kinematics of particles and rigid bodies which include linear curvilmeat, angular and relative motions; inertia, forces, impulse, momentum, work, energy and power; mechanical vibrations.

ENGR. 23 Prof. Kalafut
Solid State Materials Science 3 credits
(Prerequisite: Physics 21) The crystalline state of matter; multielectron atoms and the band theory of solids; quantum statistics; applications to p-n junction diodes including photodetectors, LED's and photovoltaics; biopolar and field effect transistors; transistor modeling.

ENGR. 32 Dr. Connolly
An Introduction to Computer Aided Design 1 credit
(Prerequisites: Math 14, Computer Science 24) This course is an introduction to the methods of drafting and design using computer aided techniques. Topics to be covered include plane geometry constructions, projection theory, sectional views, dimensioning, tolerancing and the development of working drawings. Extensive use will be made of commercially available CAD software packages. Two hours laboratory.

ENGR. 33 Dr. Connolly
An Introduction to Mechanical Design 1 credit
(Prerequisites: Engineering 21 and Engineering 32) An introduction to the design of structures and machines using the principles of mechanics and strength of materials. Topics to be covered include force analysis, stress, strain, tension, compression, shear, bending of beams, elastic and inelastic properties of materials. CAD techniques will be emphasized in the design process. Two hours laboratory.

EE. 24 Staff
Circuit Analysis 4 credits
(Prerequisite: Physics 12) Intermediate course treating Kirchoff's Laws, resistance networks, steady state and transient condition in RC, RI, and RIC networks, Thevenin's and Norton's Theorems, and simple electronic devices and their equivalent circuits. Three hours lecture and two hours laboratory per week.

EE. 30 Dr. Shamirian
Introduction to Digital Circuits 3 credits
(Prerequisite: none) Introduction to combinational and sequential digital logic circuits. Analysis and design techniques, including Boolean Algebra and Karnaugh Mapping will be discussed, and an emphasis will be placed on the use of the computer to simulate digital circuits.

EE. 104 Dr. Doiron
Electricity and Magnetism I 3 credits
(Prerequisite: Phys. 21; Math 101 may be taken concurrently). Analytical treatment of electrical and magnetic theory; vector calculus of electrostatic fields; dielectric materials; vector calculus of magnetic fields.

EE. 105 Dr. Doiron
Electricity and Magentism II 3 credits
(Prerequisite: EE. 104) Magnetic materials, electromagnetic induction, displacement currents, Maxwell's equations; radiation and waves; applications.

EE. 105L Dr. Doiron
Electromagnetics Design Laboratory 1 credit
(Prerequisite: Pys. 104; Corequisite: Phys. 105) Laboratory designed to emphasize and reinforce the experimental basis of Electromagnetism. Multi-week projects require the student to design experiments to measure the electrical and magnetic properties of matter, and the properties of electromagnetic waves. Two hours laboratory.

EE. 106 Dr. Shamirian
Discrete Electronic Devices 3 credits
(Prerequisites: EE. 24, Engr. 23) Introduction to the theory and design of analog circuits using discrete semiconductor devices such as diodes, BJTs, FFTs, SCRs and the like. Emphasis is placed on amplifier circuits and their frequency dependence.

EE. 106L Dr. McGinnis
Discrete Devices Design Lab 2 credits
(Prerequisite: EE. 24L) Experiments with diodes, BJT, FET, and MOSFET transistor. Some of the experiments will be short project types to introduce student to the application of design principles.

EE. 107 Dr. Shamirian
Digital Logic Circuits 3 credits
(Prerequisite: EE30) Combinational and Sequential Logic Circuits. Boolean Algebra, Karnaugh Maps, and State Machine methods of analysis will be discussed. The use of VLSI circuits including RAM and ROM memories and microprocessors will be investigated with a special emphasis on instrument design.

EE. 107L Dr. DiStefano
Digital Logic 2 credits
Design Laboratory
(Prerequisites: ENGR. 32, ENGR. 33, EE. 30; Corerequisite: EE. 107) Introduction into the design, construction and testing of digital logic circuits. Computer-aided Design tools will be used extensively. Most of the major components of a computer will be investigated. Three hours laboratory.

EE. 108A Dr. DeStefano
Very Large Scale 3 credits
Integration Devices I
(Prerequisite: none) Analysis of MOSFET Circuitry. Use of computer programs such as SPICE and MAGIC to design and analyze student design projects involving tens of MOSFET transistors. One hour lecture and three hours laboratory.

EE. 108B Dr. DiStefano
Very Large Scale 2 credits
Integration Devices II
(Prerequisite: EE. 108A) Continuation of EE. 108A. Student designs may involve hundreds of MOSFET transistors and may be part of a class project. Critical circuit timing analysis will be included. Three hours laboratory.

EE. 109 Dr. VanGelder
Communications Engineering 3 credits
Introduction to information theory and encoding and decoding requirements. Frequency response of linear systems, sampling, multiplexing, quantization noise. Modulation and demodulation. Introduction to noise limitations.

EE. 110-111 Dr. Spalletta
Digital Instrument Design and 6 credits
the Computer Interface
(Prerequisite: EE. 107) A review of digital circuits; microprocessor programming and interfacing; data acquisition, manipulation and transmission, microprocessor support devices, and common computer interfaces. Advanced topics include engineering applications of artificial intelligence, neural networks, and robotics. The laboratory portion of course centers on design, construction and utilization of a state of the art computer controlled instrument. 2 hours lecture and 6 lab.

EE. 112 Dr. McGinnis
Electronic Instrument Design 5 credits
(Prerequisites: EE. 24 and Math 101) Laboratory oriented course designed to acquaint Electronic Engineering students with the operation and design characteristics of electronic instrumentation. Analysis of existing electronic instruments used in various sciences as well as design of special instrumentation. Emphasis on use of operational amplifiers in design situations. Two hours lecture, five hours laboratory.

EE. 115 Dr. Shalmirian
Digital Filter Design 3 credits
A study of discrete time signals and systems, convolution, z-transform, discrete fourier transform, and FFT algorithms. Analysis and design techniques of digital filters and their realizations. Emphasis will be on the use of computer aided interactive digital signal processing programs for several projects on signal analysis and filter design.

EE. 120 Staff
Linear Control Theory 3 credits
(Prerequisite: EE. 24) The theory of feedback linear control systems. Analysis of regions of stability using Laplace Transforms.

EE. 122 Staff
Senior Electronics Design variable credit
Project
Students work with a faculty advisor or a practicing electronics engineer to consider realistic, generally unsolved problems from current technology. Projects involve creative conception, design, development and evaluation. Written and oral presentation of the subject before a group of faculty.

ENGLISH

DR. JORDAN, *Chairperson*

The student majoring in English must take English 11, English Inquiry, and eleven other English courses. With the exception of English 9 and English 12, these eleven courses must be upper division ones. Furthermore, six of them must satisfy six area requirements: **A.** British Literature: Medieval and Renaissance; **B.** British Literature: Restoration and Eighteenth Century; **C:** British Literature: Romantic and Victorian Periods; **D.** American Literature to 1865; **E.** Modern British Literature; **F.** American Literature, 1865-Present. **The student is urged to fill these area requirements sequentially.** The pattern listed below suggests one way of satisfying this requirement. To discover what other courses will satisfy this requirement, students should consult their faculty advisors or chairperson.

After freshman year, English majors may propose an alternate major program for the chairperson's approval. The department also offers two special "tracks": the **Writing Track** and the **Theatre Track.** Completion of these tracks will be noted on the student's transcript. Writing track courses include English 9, 12, 121, 122, 124, 125, 126, 128, 129. To pursue this track the student must take a minimum of five of these courses including at least one course in Creative Writing and one in Applied Writing. Theatre track courses include English 107, 108, 109, 110, 111, 118. To pursue this track the student must take a minimum of five of these courses.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Engl. 11-101	English Inquiry—British Literature	3	3
COGNATE	Electives	Cognate	3	3
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA II	Social/Behavior	Electives	3	3
GE AREA III	Communications	Elective	3	
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Engl. 102-103	British Literature	3	3
COGNATE	Electives	Foreign Language or other Cognate	3	3
GE AREA I	Nat. Sci/Quant.	Electives	3	3
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
GE AREA V	T/RS 22	Theology II		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Engl. 104-105 Elec.	Required and Elective Courses	6	6
COGNATE	Electives	History or other cognates	3	3
GE AREA II	Social/Behavior	Electives	3	3
GE AREA V	Phil-T/RS	Philosophy and/or Religious Studies	3	3
GE FREE	Elective	Elective		3
			15	18
		SENIOR		
MAJOR	Engl. 106-Elec.	Required and Elective Courses	6	6
COGNATE	Electives	Foreign Literature or other Cognates	3	3
GE AREA IV	Humanities	Electives	3	3
GE FREE	Electives	Electives	3	3
			15	15
			TOTAL: 127 credits	

For Freshman COGNATE sequence, History 3-4 or foreign language is recommended. For G.E. Area III, if student does not otherwise satisfy the University's proficiency requirements, Engl. 7 and Comm. 2 are required.

MINOR. The department suggests that the individual student cluster his or her choices around three upper-division courses within any specific period (American Literature since the Civil War, e.g.), or any literacy genre or category (the Drama, e.g.). Students may also select three advanced writing courses. There are also two required courses: 1.) English 7 (Composition) and 2.) English 11, 25, 26, 27 or 28. Those two courses, plus the three electives mentioned above would generate 15 credits, the minimum number needed for a minor.

ENGL. 7 Staff
Composition 3 credits
A study of expository and argumentative prose, and the processes and techniques effective writers use. Classical rhetorical strategies, a variety of grammatical and theoretical approaches, and (often) computer programs are employed to help students understand composition as a means of communication and as a mind-shaping discipline in the liberal arts tradition.

ENGL. 9 Dr. Fraustino
Technical & Business Writing 3 credits
A course in scientific or technical writing designed to help students improve their writing skills in preparation for their professions. Specialized training is offered in writing of proposals, reports, instructions, letters, abstracts, resumes, etc.

ENGL. 11 Dr. Casey
English Inquiry 3 credits
An exploration of literature and of literary criticism. The approach is inductive; the aim is a greater understanding of literature, and a mastery of some techniques of literary scholarship.

ENGL. 12 Dr. McInerney
Writing for the Law 3 credits
This course aims to help the student develop the writing skills that will be of particular value to prospective lawyers. Readings, exercises, and assignments stress precision and consiseness as well as careful argument. The course should also be valuable to any student who wants to improve his/her analytical ability and expressive capacity. Prerequisite: Engl. 7.

ENGL. 13 Staff
Practical Criticism 3 credits
A writing-centered course in which students read carefully and then write critiques of challenging pieces of poetry, worthwhile plays, and well-crafted short stories. One novel will also be critiqued as a term-ending paper. Prerequisite: Engl. 7 or equivalent.

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The following literature courses (English 21 through 28) are designed as cognate or general education (humanities) courses for students majoring in fields OTHER than English. English majors are not permitted to fulfill major requirements with these courses.

ENGL. 21 Staff
English Literature 450-1800 3 credits
A study of English literature from *Beowulf* to the beginnings of the romantic movement. The emphasis is textual rather than historical.

ENGL. 22 Staff
English Literature 3 credits
1800 to the Present Day
A study of English literature from romantic period to the middle of the twentieth century. The emphasis again is textual and critical.

ENGL. 23 Staff
American Literature through the 3 credits
Romantic Period
A study of major figures in America's literature from the colonial period through the age of transcendentalism including such figures as Edward Taylor, Jonathan Edwards, Hawthorne, Thoreau, Emerson, Melville, and Whitman.

ENGL. 24 Staff
American Literature to the 3 credits
Present Day
The study of major figures in America's literature from the beginnings of realism to today's literature of revolt. Included will be such disparate authors as Twain, Dickinson, Dreiser, Lewis, Hemingway, Fitzgerald, Ginsberg.

ENGL. 25 Staff
Introduction to Fiction 3 credits
An exploration of the nature of prose fiction, its elements and techniques. The emphasis is critical rather than historical. The range of works and the specific selections may vary with the individual instructor.

ENGL. 26 Staff
Introduction to Poetry 3 credits
An exploration of the nature of poetry, its value, aims, and techniques. The emphasis will be critical rather than historical. The range of poems and the specific selections will be the choice of the individual instructor.

ENGL. 27 Staff
Introduction to Drama 3 credits
An exploration of the nature of drama, its types, techniques, and conventions. The emphasis will be critical rather than historical.

ENGL. 28 Dr. Whittaker
Introduction to Irish Culture 3 credits
An exploration of Irish culture by means of the island's major works of mythology, history, religion, folk story, fairy tale, song, verse, drama, and fiction. All readings in English.

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ENGL. 101 Dr. Beal
British Literature: Medieval and Renaissance 3 credits
A detailed study of representative works and authors from the Anglo-Saxons to the seventeenth century. Though the emphasis will be on an intensive study of major works in their literary and cultural context, consideration will be given to minor writers as well.

ENGL. 102 Dr. Mitchell
British Literature: The Restoration and Eighteenth Century 3 credits
Study in depth of the major works of such authors as Dryden, Pope, Swift, Boswell, and Johnson, among others. Due attention will be given to critical analysis, literary research, and historical, social, and political background.

ENGL. 103 Drs. Casey and Faustino
British Literature: Romantic and Victorian Periods 3 credits
A study of major literary works in nineteenth century England: poetry, novels and non-fictional prose. The emphasis is threefold: critical analysis; literary history; social, intellectual and political background.

ENGL. 104 Fr. Joseph Quinn, Dr. Gougeon
American Literature to 1865 3 credits
An in-depth study of a select group of major American authors from the Colonial Period to the Civil War. Included are Bradford, Franklin, Irving, and Poe. Consideration given to the historical and cultural milieu and development of major American themes and attitudes.

ENGL. 105 Fr. J.J. Quinn
Modern British Literature 3 credits
Selected modern and postmodern English poets, playwrights, and fiction writers: Hopkins, Eliot, Hughes, Auden, Larkin, Spender, Osborne, Stoppard, Pinter, Greene, Waugh, Read, Lodge, Amis, Spark, McEwan, and Chatwin.

ENGL. 106 Drs. Whittaker & Gougeon
American Literature, 1865-Present 3 credits
Study of a select group of major American authors from the Civil War to the present. Included are Twain, Crane, Fitzgerald, and Vonnegut. The historical and cultural milieu and the development of major American themes and attitudes.

ENGL. 107 Dr. Roberts
Introduction to Theatre 3 credits
An exploration of the various artists and managers in theatre; such as actors, playwrights, directors, and set, lighting, and costume designers. The various "schools" of acting, designing, etc. are studied from an historical and practical viewpoint. Students work on a major university production as a course requirement.

ENGL. 108 Dr. Roberts
Introduction to Acting 3 credits
The basic theories of acting are explored in conjunction with study of selected scripts. The course does not stress "character development," but rather how to intelligently approach the script with the basic questions fundamental to effective acting.

ENGL. 109 Dr. Roberts
Intermediate Acting 3 credits
"Character" development is stressed in this course. The student learns how to approach characters on the page and bring them to life on the stage. Selected plays and characters are assigned for the student to master.

ENGL. 110 Dr. Roberts
Advanced Acting 3 credits
The actor now demonstrates mastery of fundamentals and character development in scene studies from plays selected to prove his ability "to enlighten" the script with insight and skill. Performance level quality is expected; the final exam (in part) will be "staged" scenes presented to an invited audience.

ENGL. 111 Dr. Roberts
Directing the Play 3 credits
Students first learn the stage director's approach to play analysis and the ways to arrive at a directorial concept for a particular play. The techniques of communicating concept to fellow theatre artists and audience are considered, followed by practical exercises in developing the scenic elements of production. The course culminates in a workshop of student-directed short plays open to the public. (Prerequisite: Engl. 108, or permission of instructor.)

ENGL. 112 Drs. Rakauskas, McInerney, Prof. Hill
Advanced Composition
(formerly Media III; Prerequisite: Engl. 7 or exemption). The purpose of this course is to review, practice and apply the principles of a rhetoric of order, stressing invention, disposition, style, tone and theme. (GE AREA III)

ENGL. 114 Drs. Wallace & McInerney
History of Cinema 3 credits
A study of historical development of motion pictures. Practicioners in America and throughout the world are treated in this concise history of cinema. Film screening fee. (GE Area IV)

ENGL. 115 Drs. Wallace & McInerney
The Art of Cinema 3 credits
The study of the artists, technicians and businessman who make films. Taped interviews of internationally famous film makers, as well as an analytic scrutiny of modern films, develop students' intelligent, active participation in the major art form in modern culture. Film screening fee. (GE Area IV)

ENGL. 116 Drs. McInerney & Wallace
Film Genres 3 credits
A study of the popular film genres (i.e., the western, the thriller, the musical, the historical epic, the woman's picture as it developed and changed in the U.S. and abroad.) Film adaptations of literature; plays, novels, stories. Film screening fee. (GE Area IV)

ENGL. 117 Drs. Wallace & McInerney
Film Criticism 3 credits
A study of the grammar, poetics, rhetoric, and aesthetic of film critics constitute the heart of this course. Film screening fee. (GE Area IV)

ENGL. 118 Dr. Roberts
Drama Practicum 3 credits
Work on one of the major aspects of producing a play: acting, costuming, set construction, lighting, publicity, and box office management. Prerequisite: Engl. 27 or advanced drama course (e.g., Engl. 131, 132, 133, 149, 150) or Engl. 11.

ENGL. 121 Staff
Scriptwriting 3 credits
Introduction to the film and television format for dramatic productions of varying lengths. Documentaries are also studied. Students not only master technique but also explore development of plot and character. Four major assignments and several short projects are required. Prerequisite: Engl. 7 or equivalent.

ENGL. 122 Staff
Play Writing 3 credits
Course is designed to teach student craft and technique of writing a play. The student will explore his own abilities through play writing and will be responsible for writing a full one act play or one act of a two or three act play. (GE Area III or IV)

ENGL. 124 Prof. Hill
Poetry Writing I
Theory and practice of writing poetry with attention to modern and contemporary tradition and criticism. Opportunity for sustained, serious response to student work and practical advice on markets, publishing procedures, etc. The course employs a workshop format and encourages serious reading and discussion of poetry.

ENGL. 125 Dr. Rakauskas
Written Communication; Strategies for Teaching Writing 3 credits
Those elements of the communication process peculiar to developing writing skills with emphasis placed on writing as a process. Student is involved in laboratory activities: each class member experiences a "mini-teaching responsibility" by functioning as laboratory assistant for the University's writing center, by planning assignments, generating writing situations, and responding as an audience. (GE Area III)

ENGL. 126 Prof. Schaffer
Fiction Writing I
Designed to increase students' skills in writing short prose fiction, this course augments frequent practice in the genre with attention both to theories of short story composition and to diverse examples. In a workshop atmosphere, students will read and discuss one another's work as well as fiction by well known authors.

ENGL. 127 Dr. Rakauskas
Teaching Modern Grammars 3 credits
This course is designed to provide an understanding of the English language and its grammar, based upon recent linguistic analysis of the language, and to assist the future teacher in his understanding of transformational/generative grammar and its place in the curriculum. Techniques for teaching these new grammars, and laboratory teaching experience in the freshman writing clinic will be presented. Students seeking certification as secondary school English teachers should also be advised that the usual teacher of Engl. 127, as well as 125, Dr. Wm. Rakauskas, supervises student teachers for the department. (GE Area III)

ENGL. 128 Prof. Hill
Poetry Writing II 3 credits
Advanced workshop on practice and theory of writing poetry. The course encourages extensive reading and intensive writing. English 124 is the prerequisite.

ENGL. 129 Prof. Schaffer
Fiction Writing II 3 credits
Advanced workshop augments intensive student writing assignments with theory of fiction composition and diverse examples. English 126 is the prerequisite.

ENGL. 130 Dr. Beal
Chaucer 3 credits
A study of Chaucer's poetry in the context of medieval culture. Readings and assignments will concentrate on *The Canterbury Tales,* but will also cover the other major poems, such as the *Book of the Duchess* and the *Parliament of Birds.*

ENGL. 131 Staff
Shakespeare's Tragedies 3 credits
Study of *Romeo and Juliet, Hamlet, King Lear, Macbeth,* and *Othello* along with general theories of the tragic form.

ENGL. 132 Staff
Shakespeare's Comedies 3 credits
Study of *As You Like It, Merchant of Venice, Twelfth Night, Midsummer Night's Dream, Much Ado About Nothing,* along with general theories of romantic comedy form.

ENGL. 133 Staff
Shakespeare: 1600-1616 3 credits
Study of *Troilus and Cressida, All's Well, Measure for Measure, Coriolanus, Cymbeline, Winter's Tale, Tempest* against a background of speculation as to why they cause problems of interpretation.

ENGL. 134 Staff
Shakespeare History 3 credits
One hundred years of British history seen through the eyes of both professional historians and Shakespeare. *Richard II* and *III, Henry IV, V,* and *VI* are covered.

ENGL. 135 Dr. Mitchell
Johnson and His Circle 3 credits
This course will examine the poetry and prose of Dr. Sam Johnson, the great 18th century author-critic, and will also treat the works of those talented writers whom he influenced directly. Analysis of prose strategies and poetic techniques will be stressed.

ENGL. 136 Dr. Fraustino
Keats: Death and Love 3 credits
Course will focus almost exclusively on one writer, John Keats, and explore the dynamic relationship in his poetry between death and love.

ENGL. 137 Dr. Gougeon
Melville-Hawthorne 3 credits
Ths course will survey a significant sampling of the short works of two of America's most famous Romantic authors. Consideration will be given to the historical milieu and the authors' literary responses to the problems and promises of the American experience.

ENGL. 139 Fr. J.J. Quinn
Poetry of Hopkins, S.J. 3 credits
(Prerequisite: Engl. 11 or Engl. 26) Gerard Manley Hopkins, the only priest-poet in history to be honored with a place in Westminster Abbey's Poets' Corner, will be studied in his poetry and Jesuit background as a Nature, Victorian, Religious, Original, Theological, Meditative, and the first Modern Poet.

ENGL. 140 Prof. Hill
Conrad's Fiction 3 credits
A reading of major works by Conrad and survey of critical response to this quintessential modern Western writer.

ENGL. 141 Fr. J.J. Quinn
Flannery O'Connor 3 credits
A critical study of the short stories and novels of the modern American Christian writer.

ENGL. 143 Prof. John Hill
British Imperial Fiction 3 credits
The myths and meanings of the Imperial experience in the 19th and 20th centuries as represented in British fiction by Kipling, Conrad, Greene, Orwell and others.

ENGL. 144 Dr. Beal
Dante's Divine Comedy 3 credits
A canto by canto study, in translation, of Dante's dream vision of hell, purgatory, and heaven. Consideration given to the cultural milieu and to medieval art and thought as these affect the allegorical meaning and structure of the poem.

ENGL. 145 Dr. Whittaker
Irish Fiction: Joyce
This course explores the prose works of James Joyce, one of the lights of Anglo-Irish writing, and a major figure in twentieth century literature. We will read and discuss *Dubliners, A Portrait of the Artist as a Young Man,* and, with the help of various guides, the masterpiece, *Ulysses.* We will work to apprehend in Joyce both the universal and the peculiarly Irish.

ENGL. 146 Dr. Jordan
Modern Poetry 3 credits
Modern poets ranging from Yeats and Hopkins to Plath and Hughes are examined. Major emphasis is placed on close critical readings of representative works.

ENGL. 147 Fr. J.J. Quinn
Modern American Short Story 3 credits
An intensive study of representative modern American Masters of the short story form. The film version of many stories studied allows an enriching comparative experience.

ENGL. 148 Fr. J.J. Quinn
Irish Short Story 3 credits
Introduces American students to the variety and richness of the short story from the pens of such masters as Yeats, Joyce, Frank O'Connor, Lavin, Kiely, F. O'Brien, McGovern, Jordan, Trevor, Beckett and others. Serious craftsmen aware of the verbal tradition, shapers of the Literary Revival, these masters of language forge a literature that affirms spiritual values in the midst of material misery.

ENGL. 149 Dr. McInerney
Dramatic Comedy 3 credits
Principles, modes, tactics used in dramatic comedy. Shakespeare to Neil Simon, as well as several films, analyzed as models. Opportunity for student writing of comedy.

ENGL. 150 Dr. McInerney
Modern Drama 3 credits
A detailed introduction to the major trends and authors in 20th century British and American drama, with some Irish and Continental works included. Readings and assignments will focus on major figures such as Shaw, O'Neill, Miller, Williams.

ENGL. 151-152 Staff
History of the Theatre 6 credits
A study of the various ages of Western theatre; the method is concentration on individual playwrights, the historical circumstances in which they lived and worked, the traditions they inherited.

ENGL. 153 Fr. J.J. Quinn
Modern Novel 3 credits
The evolution of the novel from modern to postmodern times. Major American and English writers are studied from traditional narrative to self-conscious stylistic devices.

ENGL. 154 Dr. Casey
The English Novel: Defoe to Hardy 3 credits
The history of the English novel from its origins in the early 18th century until the end of the 19th century. The course will cover the literary, social, and intellectual sources of the novel as well as its artistic development. Richardson, Fielding, Austen, Dickens, Eliot are also covered.

ENGL. 155 Dr. Beal
Camelot Legend I 3 credits
The development of the "King Arthur Story" from the medieval period to the nineteenth century. Exploration of the legend's remarkable adaptability to different cultural and literary milieux.

ENGL. 156 Dr. Mitchell
Milton & 17th Century Poetry 3 credits
The poetry of John Milton, "a major figure", the Metaphysical poets and the Cavalier poets ought to bring the student to a reputable understanding of late English renaissance. The 17th century is a vital era for those wishing to understand the results of the Elizabethan Age and the onrush of the Restoration and 18th century poets.

ENGL. 157 Dr. Beal
Camelot Legend II 3 credits
Prerequisite: Camelot I or Instructor's permission. The development and elaboration of the legend in twentieth century forms: novels, musicals, movies and the short story. Emphasis on writing and class discussion.

ENGL. 158 Fr. Joseph Quinn
Transcendentalists 3 credits
Course transcends typical limits of this literary period to Emerson and Thoreau's major works. Thus, Orestes Brownson, Margaret Fuller, Ellery Channing, Theodore Parker are covered.

ENGL. 159 Fr. Joseph Quinn
American Realists 3 credits
Study of representative figures in the post Civil War period, the period of the rise of American realism. Authors treated will be Mark Twain, Henry James, Stephen Crane and selected modern authors.

ENGL. 162 Dr. Mitchell
Harlem Renaissance 3 credits
A concentrated study of the most fruitful era in American literature of the 1920's, let alone Black literature, with particular references to the social, economic, and political life of the times.

ENGL. 164 Dr. Mitchell
Black Literature 3 credits
This is an introductory survey course in Afro-American literature featuring an in-depth examination of the works of major Black authors from the colonial American period to the present.

ENGL. 165 Dr. Gougeon
American Romanticism 3 credits
This course will deal with representative short works of America's six major Romantic authors: Emerson, Thoreau, Whiteman, Hawthorne, Melville, and Poe.

ENGL. 166 Dr. Gougeon
Major Works: American Romantics 3 credits
Cooper's *the Prairie,* Emerson's *Nature,* Thoreau's *Walden,* Melville's *Moby Dick,* and others. Evaluation of the works in their historical context and the development of the American Romantic movement, 1820-65.

ENGL. 167 Dr. Gougeon
Major Works: American Realists 3 credits
Twain's *Huckleberry Finn,* Howell's *The Rise of Silas Lapham,* James' *The American,* Crane's *The Red Badge of Courage,* Dreiser's *Sister Carrie,* and others. Works are evaluated in their historical milieu and the development of American Realism, 1865-1900.

ENGL. 168 Staff
American Drama: 1919-1939 3 credits
A review of the first "golden age" of American drama, which includes biting masterpieces such as *The Hairy Ape, Awake and Sing,* and comic works such as *You Can't Take It With You* and *The time of Your Life.*

ENGL. 171 Dr. Jordan
Myth of the Hero 3 credits
Mythic materials are examined to discover the underlying heroic archetypal patterns. Then modern literature is examined in the light of the same mythic patterns.

ENGL. 172-173 Dr. Jordan
Masterworks of Western Civilization 6 credits
Study of masterpieces of literature from the Hebrew Old Testament and classic Greek to the modern European illuminating the development of Western civilization.

ENGL. 174 Dr. Mitchell
The Bible as Literature 3 credits
A non-theological examination of the major literary achievements of the Old and New Testaments, emphasizing the generic diversity and aesthetic richness of their individual components.

ENGL. 176 Staff
Magazine Editing 3 credits
The process of editing is surveyed. Macro-editing (publishing for a defined audience and delighting, surprising, informing, and challenging it) is emphasized over micro-editing (grammar, punctuation, and so forth). Both are fit into the larger picture of promotion, fulfillment, circulation, advertising, production, and distribution.

ENGL. 177 Dr. Martinez-San Jose
Children's Literature and Prof. Johnson
3 credits
A broad study of literature for children since 1800, with the emphasis on American works since 1950, including aesthetic consideration of the art and design of picture books. Works are considered for children up to the age of 12.

ENGL. 180 Staff
Formal Language Theory 3 credits
An investigation into the nature of grammar from a robotic point of view. The intent is to make the course understandable to students with no prior background in either linguistics or computer science, though some practice in the manipulation of symbols (Formal Logic) and some exposure to elementary programming are desirable.

ENGL. 182 Dr. Whittaker
Humor in American Literature 3 credits
Insights into the American experience and character by examining the unique sources of humor and its manifestation in our literature. Native "down East" and old Southwest humor and the local colorists, as well as mainstream humorists as Washington Irving, Mark Twain, Dorothy Parker, James Thurber, and E.B. White, as well as comic playwrights such as Philip Barry, Kaufman and Hart, and Clare Booth Luce.

ENGL. 183 Fr. Hill
Literature of the Great War 3 credits
A study of the poetry of World War I, the fiction that developed out of the war, and the conditions that gave rise to this literature.

ENGL. 185 Dr. Passon
Introduction to Satire
An exploration of the historical, critical, and conceptual nature of satire, including established satirical conventions and techniques. Representative examples in fiction, drama, and poetry, from a variety of literary periods, will be considered. Special emphasis will, however, be placed on British literature of the Restoration and Eighteenth Century, the Age of Satire. Though the course will focus on satirical literature, examples of satire from other media will be sampled.

ENGL. 186 Fr. J.J. Quinn, &
Modern Irish Poets Dr. Whittaker
3 credits
This course covers seven major modern Irish poets: Clarke, Kavanagh, Devlin, Murphy, Kinsella, Montague and Heaney. These selected poets and their selected poetry reveal a common lyrical tone in seven distinct voices.

ENGL. 187 Fr. J.J. Quinn
Modern Irish Novel 3 credits
A selective introductory course to Ireland's renowned modern novelists: Francis Stuart, John McGahern, William Trevor, Neil Jordan, Brian Moore, Bernard MacLaverty, John Banville and others. These literary artists capture the verve, flavor, and life illumination that distinguish today's Irish novels.

ENGL. 188 Dr. Fraustino
Literature of the Absurd 3 credits
Focusing on literature from 1850 to the present, this course will examine works of fiction, drama, and to some extent poetry that reflect a general 19th and 20th century western sense of disintegrating values and lost religious beliefs. Readings will include works by Edgar Allan Poe, Lord Byron, Thomas Hardy, Robert Louis Stevenson, Joseph Conrad, Tennessee Williams, Ernest Hemingway, and Samuel Beckett.

ENGL. 189 Dr. Fraustino
Macabre Masterpieces 3 credits
This course studies works of horror—or Gothic—fiction in England and America that best exemplify this mode of writing as a serious art form in its exploration of the human mind, particularly abnormal psychology. Works we will read may include: Mary Shelley's *Frankenstein,* Robert Louis Stevenson's *Dr. Jekyll and Mr. Hyde,* Joseph Conrad's *Heart of Darkness,* Bram Stoker's *Dracula*, the works of Edgar Allan Poe, and others.

ENGL. 190 Fr. J.J. Quinn
Travel Seminar: London 3 credits
Guided visits to London galleries, museums, theatres, cinema, broadcast studios, concert halls, Royal Shakespeare Co.; meetings with stage personalities. (Intersession.)

ENGL. 191-197 Staff
Guided Independent Study varible credit
A tutorial program open to Junior and Senior students. Content determined by mentor.

ENGL. 198 Staff
Internship variable credit
English major can receive internship credits for a variety of on-the-job work experiences. Approval must be obtained beforehand from chairman and dean.

Oscar-winning actress, Glenda Jackson, and Rev. J.J. Quinn, S.J., conducting campus seminar on Theatre Arts.

FINE ARTS

PROF. ROGERS, *Chairperson*

The University's Fine Arts Department offers courses in art and music which develop students' creative expression, enhance their aesthetic appreciation and judgment, and deepen their understanding of the peoples and cultures from which classics in the Fine Arts have come.

Courses in Fine Arts can satisfy a student's General Education requirements in three ways:

a) applied or studio art courses (ART 60-64, 150-154) can satisfy requirements in GE AREA III—Communications;

b) art and music history and appreciation courses can satisfy requirements in GE AREA IV—Humanities;

c) any course in Fine Arts can be used as a Free Elective.

FINE ARTS 10 Prof. Rogers and
Creativity in the Fine Arts Dr. Wolterink
3 credits

An examination of the creative process in music and the visual arts. Material will be drawn from a variety of historical periods with an emphasis on development since 1945.

ART 21-22 Prof. Jones
History of World Art 3-3 credits

The interpretation, appreciation, and aesthetic norms of painting, sculpture, and architecture of the ancient world (Egypt, Rome, Greece), Byzantium, the Middle Ages, and early Renaissance are discussed in the first semester. During the second semester, the High Renaissance, Baroque, Impressionism, Post-Impressionism, and Twentieth Century Art are the subjects studied.

ART 60 Prof. Rogers
Two Dimensional Design 3 credits

This course is an exploration of visual organization utilizing two dimensional means. Various diverse materials will be used in working with the elements of line, texture, shape, volume, mass, and color.

ART 62 Prof. Rogers
Three Dimensional Design 3 credits

A foundation course that investigates basic materials and approaches in the creation of three dimensional form. Emphasis is directed towards a hands on involvement with diverse media, technique, and tools of the sculptor's craft.

ART 64 Prof. Rogers
Basic Drawing 3 credits

A foundation course designed to develop the student's skills in basic drawing and perception. Various media are employed in exercises involving the use of line and shading, shape and space, design and composition leading to the development of visual expression.

ART 103 Dr. Dunn
Art of the Ancient World 3 credits

A survey of the art and architecture produced by early man, 30,000 - 1,250 B.C., the course opens in the painted caves of Prehistoric Europe; continues through the contemporaneous civilizations of the Ancient Near East (Sumer, Babylon, Assyrian, Persia) and Egypt; and, concludes in the Aegean with the Minoan and Mycenaean cultures celebrated by Homer.

University Art Gallery.

ART 104 Dr. Dunn
Etruscan and Roman Art and Architecture 3 credits
This survey of the art of ancient Italy begins c.800 B.C. with the art of the Etruscans. Five hundred years later, Roman capture of Etruria introduces a new and powerful culture to the Italian peninsula. The course subsequently focuses on Roman art and architecture (3rd c. B.C. - 5th c. A.D.), moving from the paintings of ancient Pompeii to the art sponsored by the first Chrisitian emperor, Constantine.

ART 105 Dr. Dunn
Early Christian and Byzantine Art 3 credits
The art and architecture produced by the first Chrisitians borrowed much from the forms and ideas of ancient Roman art. The course will survey art produced in Rome, Ravenna, Milan, Greece, and Constantinople, 200-1100 A.D. Emphasis will be placed on the origin and symbolism of Christian imagery and architecture.

ART 107 Dr. Dunn
Renaissance Art and Architecture, 1250-1500 3 credits
A survey of the art produced in Italy, 1250-1500, the course opens with the work of Cimabue in Assisi of St. Francis; continues into the fourteenth century with the frescoes of Giotto and his followers, and with the painters of Duccio's Siena; and concludes with such fifteenth-century artists as Brunelleschi, Donatello, Botticelli, Leonardo da Vinci, and the young Michelangelo.

ART 111-112 Prof. Jones
History of American Art 6 credits
A survey of the architecture, sculpture, and painting in America from the 17th century to the present day. First semester covers from earliest exploration days, the Indians' arts, and the colonial period through the Civil War. Second semester will cover the period from 1865 through contemporary trends including photography, graphic, and decorative arts.

ART 115 Dr. Dunn
Modern Art History 3 credits
This course surveys the artistic developments in painting, architecture and sculpture from the Neo-Classic period through contemporary trends. Special emphasis will be placed upon the stylistic developments of European Art as manifested in France, Germany, and Spain during the nineteenth and twentieth centuries.

ART 150 Prof. Rogers
Basic Painting Techniques 3 credits
An introduction to the basic materials and techniques of painting using acrylic polymer paints. The student will develop skills and abilities in the preparation of painting surfaces and execution of unique visual expressions.

ART 152 Prof. Rogers
Intermediate Painting Techniques 3 credits
This course encourages student involvement with selected painting materials and techniques. A wide range of uses and forms of expression will be investigated. Unique individual directions and experimentation are encouraged.

ART 154 Prof. Rogers
Advanced Painting Techniques 3 credits
This course emphasizes the continued growth of a unique individual approach toward painting. Content, style, and technique will be determined by the individual student.

ART 191-195 Staff
Guided Independent Study in Art 3 credits
Courses are intended to meet specific needs. Content and methodology vary.

MUS. 10 Dr. Wolterink
Understanding Music 3 credits
An examination of music representing a wide variety of style, genres, historical periods, and geographical areas, with an emphasis on the development of perceptive listening skills. Folk, popular, rock, jazz, and classical music will be considered.

MUS. 21 Dr. Wolterink
Music History I 3 credits
The history and literature of Western classical music from the medieval period to the eighteenth century, including Gregorian chant, the growth of polyphony, the rise of instrumental music and the birth and growth of opera.

MUS. 22 Dr. Wolterink
Music History II 3 credits
The history and literature of Western classical music from the eighteenth century to the present, including the increasing importance of instrumental music and opera, the development of atonality and serial music, and the recent avant-garde.

MUS. 105 Dr. Wolterink
The Symphony 3 credits
Development of the symphony as an independent genre, from its origins in the mid-eighteenth century to the present day. Works by Haydn, Mozart, Beethoven, Brahms, Tchaikovsky, Mahler, Shostakovich and Stravinsky will be among those considered.

MUS. 107 Sr. Roccasalvo, CSJ
Choral Music 3 credits
A survey of the major choral works of the sacred and secular repertories. From plainchant to Handel and Bach to Berstein and groups such as the Mormon Tabernacle Choir, the King's Singers and Slavic/Russian choirs. Includes music of Europe, Soviet-dominated countries and the United States.

MUS. 109 Staff
Keyboard Music 3 credits
The music written for the piano, organ, harpsichord and clavichord from the Renaissance to 20th Century. Designed for non-musicians, the course focuses on the development of keyboard instruments and the forms and composers that dominate the literature. Recordings, live performances and a field trip.

MUS. 111 Dr. Wolterink
Bach 3 credits
The music of Johann Sebastian Bach in the context of the musical forms, styles, and genres current in the first half of the eighteenth century. A brief survey of Bach's life and works will be followed by more detailed study of selected vocal and instrumental compositions.

MUS. 113 Dr. Wolterink
Mozart 3 credits
An examination of Mazart's major works in the genres of the symphony, the concerto, chamber music, church music and opera, together with a brief biographical survey. The influence of late eighteenth century culture and musical conventions on Mozart's work will be considered.

MUS. 114 Sr. Roccasalvo, CSJ
From Bach to Rock 3 credits
The music of Western civilization from J.S. Bach and G.F. Handel to recent developments of the 20th century. Special attention to Haydn, Mozart and Beethoven.

MUS. 115 Sr. Roccasalvo, CSJ
Beethoven 3 credits
Study of a composer whose fiery personality drove him to express in music universal concepts in an age of revolution, i.e., freedom and the dignity of the person. Course traces the evolution of Beethoven's major works — sonatas and concertos, symphonies and string quartets as well as FIDELIO and the MISSA SOLEMNIS. The effect of his deafness on his view of life and on his later works.

MUS. 116 Dr. Wolterink
American Musical Theatre 3 credits
The development of musical theatre in America from the nineteenth century to the present, with an emphasis on work composed in the last forty years. Works by Jerome Kern, Rodgers and Hammerstein, Lerner and Loewe, Leonard Bernstein and Stephen Sondheim will be among those considered.

MUS 120 Sr. Roccasalvo, CSJ
Italian Music 3 credits
A survey of music as it developed in Italy from the Renaissance to the present day. Focus on a) the centers of musical activity, i.e., Florence, Venice, Rome, Bologna and b) vocal and instrumental genres, especially the string repertoire and families who made string instruments, i.e., Amati, Guarneri, Stradivari.

MUS. 121 Sr. Roccasalvo, CSJ
Renaissance to Reformation 3 credits
The music of Western civilization beginning retrospectively with the choral music of the Middle Ages. Main focus on vocal and instrumental developments in Italy, the Franco-Netherlands School and in England. Culminating with the music of the Protestant and Catholic Reformation. Contributions of the Jesuits to sacred and secular music.

MUS. 122 Sr. Roccasalvo, CSJ
Musical Russia 3 credits
A survey of the music of the Rus' people—Southwestern Rus' and Great Russia. Choral and instrumental music from the 10th century to the present day. Western influences on Great Russia. Special focus on the "Mighty Five," Tchaikovsky, Rachmaninoff, Stravinsky.

MUS. 123 Dr. Wolterink
Music in America 3 credits
An overview of the development of music in the United States from colonial times to the present, with an emphasis on the twientieth century. Classical, popular, and traditional musical styles will be considered, including the symphony, the opera, the Broadway show, jazz, rock, hymnody, and folk music.

MUS. 185 Dr. Wolterink
Music Theory I 3 credits
The fundamental materials of tonal music: notes and rests, rhythm and meter, scales and modes, intervals, triads and seventh chords, melodic and harmonic organization and an introduction to voice leading and part writing. Some knowledge of music notation helpful.

MUS. 186 Dr. Wolterink
Music Theory II 3 credits
(Prerequisite: MUS. 185) Extension of the tonal chromatic vocabulary to include chromatic harmony, modulatory techniques, and the use of extended chords, as well as an overview of selected post-tonal procedures.

MUS. 191-195 Staff
Guided Independent Study in Music 3 credits
Courses are intended to meet specific needs. Content and methodology vary.

FOREIGN LANGUAGES AND LITERATURES

DR. PARSONS, *Chairperson*

The program of the Foreign Language Department is designed to enable the student to read, write, speak and comprehend one or more foreign languages; to think and express him/herself logically, precisely and critically in one or more foreign languages; to acquire skills in literary criticism by reading representative foreign authors; to gain insight into the evolution of the culture and civilization of foreign peoples as reflected in their literature.

The Bachelor of Arts program in Classical Language gives the student a solid foundation in Latin and Greek to engender an appreciation of the liberal aspects of Classical Studies. Classics majors are encouraged to take their junior year abroad at Loyola University's Rome Center of Liberal Arts with which the University of Scranton is affiliated.

A major in a foreign language requires the completion of 36 credits in one language beginning with the intermediate level if it is modern, and the elementary level if it is classical. Modern language majors normally take at least 12 credits in a second language, either modern or classical, as their cognate. A double major may be pursued by taking 36 credits in one language beginning with the intermediate or elementary level, and by satisfying the major and cognate requirements of another department. The placement of students at a particular foreign language level is the responsibility of the chairperson.

As indicated on p. 84, language students interested in careers in industry can pursue an alternative major incorporating courses in business.

MODERN LANGUAGES

FRENCH

FRENCH 1-2
Elementary French 6 credits
Designed to impart a good basic foundation in comprehending, speaking, reading, and writing of the French language. Designed primarily for students with no or insufficient background in the French language. Meets four hours a week or equivalent.

FRENCH 23-24
Intermediate French 6 credits
(Prerequisites: French 1-2, or equivalent) Designed to give greater scope and depth to the student's knowledge of the grammar and style of the French language, with readings of original works selected from French literature. Meets four hours a week or equivalent.

FRENCH 101-102
Advanced French Composition 6 credits
(Prerequisites: French 23-24, or equivalent) An intensive course in French composition and conversation with emphasis on detailed study of advanced grammatical and stylistic usage of the French language. Meets three hours a week, or equivalent, and one hour weekly independent language laboratory practice.

FRENCH 105 Dr. Petrovic
French Masterpieces in Translation 3 credits
The study of selected major works from the leading French writers that have made an important contribution to the development of Western civilization. Such authors as Camus, Flaubert, Baudelaire, Gide, Proust, Malraux and Strendhal will be discussed.

FRENCH 111-112
Survey of French Literature 6 credits
(Prerequisites: French 101-102, or equivalent) A review of French literature from the chanson de geste to the contemporary period. Meets three hours a week or equivalent.

FRENCH 113-114
Survey of French Culture and Civilization 6 credits
(Prerequisites: French 101-102, or equivalent) A review of the historical, philosophical, artistic, literary, and scientific development of the French people from the Roman occupation to the present. Meets three hours a week, or equivalent.

FRENCH 131
Medieval and Renaissance French Studies 3 credits
(Prerequisites: French 101-102, or equivalent) Selected literary works from the eleventh century to the late Renaissance. Meets three hours a week, or equivalent.

FRENCH 141
XVIIth Century French Studies 3 credits
(Prerequisites: French 101-102, or equivalent) Literary, philosophical, and social expression from 1610 to 1715. Meets three hours a week, or equivalent.

FRENCH 151
XVIIIth Century French Studies 3 credits
(Prerequisites: French 101-102, or equivalent) The Enlightenment from 1715 to 1789. Meets three hours a week, or equivalent.

FOREIGN LANGUAGE

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Language	Intermediate or Advanced Language	3	3
COGNATE	Lang. 1-2 or 23-24	Second Modern or Classical Language	3	3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Lang. 101-102	Advanced Composition and Conversation	3	3
COGNATE	Lang. 23-24	Second Modern or Classical Language	3	3
COGNATE	Lang. 184-Elec.	Introduction to Linguistics*-Elective	3	3
GE AREA II	Social/Behavior	Electives	3	3
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS 22	Theology II	3	
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Language	Advanced Language Electives	6	6
COGNATE	Elective	Elective	3	
GE AREA II	Social/Behavior	Electives	3	3
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil.-T/RS	Philosophy or Religious Studies Elective		3
GE FREE	Elective	Elective		3
			15	18
		SENIOR		
MAJOR	Language	Advanced Language Elective	6	6
COGNATE	Elective	Elective	3	
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil.-T/RS	Philosophy or Religious Studies Elective		3
GE FREE	Electives	Electives	3	3
			15	15

TOTAL: 127 credits

*Required for modern language majors seeking certification in secondary education; recommended for Modern Language majors.

In AREA III, English 7 and Comm. 2 are recommended during freshman year.
In AREA IV, Hist. 114, 115, 116, 119 or 161-62 are recommended for modern language majors.

Students who begin language at the Advanced (101) level will take 6 credits less in the major and 6 credits more in the Cognate or FREE AREA in either Junior or Senior year.

MINOR. A minor in a foreign language, open to students in all disciplines, can be achieved by the completion of 18 credits beginning at the intermediate level if the language is modern, and at the elementary level if it is classical. Students who minor in two languages must complete a total of 24 credits distributed equally among the two languages.

INTERNATIONAL LANGUAGE-BUSINESS

The major in International Language-Business is a professionally oriented program. Its purpose is to make language study a more career-structured discipline by providing students with the opportunity to acquire a liberal education while, at the same time, taking courses specifically relevant to the business enterprise.

In order to bridge the communication gap between multinational business and the lack of functional language skills often exhibited by the personnel representing them, specialized language courses focusing on the business terminology and cultural setting of the countries in question complement the regular language and business courses in this major.

The department strongly recommends that students study abroad during their junior year. Students who take advantage of the option to study abroad have the opportunity to pursue a business internship to gain practical experience in their language specialty. Academic credit earned during an internship will be in addition to the 130 credits stipulated for the program, unless there is room in the Free Area for the internship credits.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Language	Intermediate or Advanced Modern Language	3	3
COGNATE	Lang. 1-2 or 23-24	Second Language	3	3
GE AREA I	Nat. Sci./Quant.	Electives*	3	3
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Lang. 101-102	Advanced Composition and Conversation	3	3
COGNATE	Lang. 23-24 or 101-102	Second Language	3	3
MAJOR	Acc. 3-4	Financial-Managerial Accounting	3	3
GE AREA II	Econ. 11-12	Principles of Economics I-II	3	3
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS 22	Theology II	3	
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Lang. 181-182	Advanced Stylistics	3	3
MAJOR	Language	Advanced Language Electives	3	3
MAJOR	Mgt. 108	Organization and Management	3	3
MAJOR	Mkt. 107	Managerial Marketing	3	
GE AREA II	Social/Behavior	Electives**	3	3
GE AREA III	Cmps. 21	Introduction to Computer Science	3	
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil.-T/RS	Phil. or Religious Studies Elective***		3
GE FREE	Elective	Elective		3
			18	18
		SENIOR		
MAJOR	Lang. 183	Commercial and Business Language	3	
MAJOR	Language	Advanced Language Electives	3	6
MAJOR	Mgt. 168	International Business	3	
MAJOR	EC/FIN. 165	International Economics & Finance		3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil.-T/RS	Phil. or Religious Studies Elective		3
GE FREE	Elective	Elective****	3	
			15	15

TOTAL: 130 credits

* Recommend Math 6-7 Quantitative Methods I-II

** Recommend Pol. Sci. 111 International Relations as one of these.

*** Recommend Phil. 133 Business Ethics

**** Recommend Pol. Sci. 133 Political Science Statistics I

FRENCH 161
XIXth Century French Novel 3 credits
(Prerequisites: French 101-102, or equivalent) The development of prose narration as reflected in the literary movements of the age. Meets three hours a week, or equivalent.

FRENCH 162
XIXth Century French Poetry 3 credits
(Prerequisites: French 101-102, or equivalent) The development of poetic forms from the romantic to the symbolist movement inclusively. Meets three hours a week, or equivalent.

FRENCH 171
XXth Century French Novel 3 credits
(Prerequisites: French 101-102, or equivalent) The development of prose narration from the Dreyfus case to the present. Meets three hours a week, or equivalent.

FRENCH 173
XXth Century French Drama 3 credits
(Prerequisites: French 101-102, or equivalent) The development of dramatic forms from the Theatre Libre to the present. Meets three hours a week, or equivalent.

FRENCH 181-182
Advanced French Stylistics and Phonetics 6 credits
(Prerequisites: French 101-102, or equivalent) Designed to strengthen the speaking and writing skills while emphasizing the production of speech sounds and their transcription by the International Phonetic Alphabet. Exercises in enunciation and phraseology, besides a refined usage of grammar and syntax. Meets three hours a week, or equivalent, and one hour weekly independent language laboratory practice.

FRENCH 183
Business French 3 credits
(Prerequisites: French 101-102, or equivalent) Overview of the spoken and written language of the French business world. Formalities and conventions of letter writing, banking, import/export, and other commercial transactions. Analysis of terminology from business-related areas such as finance, insurance, and international commerce within a contemporary cultural setting. Meets three hours a week, or equivalent.

FRENCH 191-192
Guided Independent Study Variable credit
(Prerequisites: French 101-102, or equivalent) A tutorial program open to junior and senior students only. Content determined by mentor.

GERMAN

GERMAN 1-2
Elementary German 6 credits
(Prerequisite: none) A complete course in the fundamentals of the German Language. Emphasis on reading of graded texts, with written and oral and aural exercises. Designed primarily for student with no or insufficient background in the German language. Meets four hours a week, or equivalent.

GERMAN 23-24
Intermediate German 6 credits
(Prerequisites: German 1-2 or equivalent) Reading from modern authors of moderate difficulty. Oral and written exercise. Systematic review of German grammar. Meets four hours a week, or equivalent.

GERMAN 25-26
Introduciton to Business German 6 credits
(Prerequisites: German 1-2, or equivalent) Specialized intermediate-level course for students who wish to focus their skills on the language of the business world. Oral and written exercises. Systematic review of German grammar. Meets four hours a week, or equivalent.

GERMAN 101-102
Advanced German Conversation and Composition 6 credits
(Prerequisites: German 23-24, or equivalent) Selected texts in prose and poetry. Advanced practice in conversation and composition. Survey of German grammar. Meets three hours a week, or equivalent, and a one hour weekly independent language laboratory practice.

GERMAN 111-112
Study of German Literature and Culture 6 credits
(Prerequisites: German 101-102, or equivalent) A survey of German literature from the eleventh century to the contemporary period, with special emphasis on the main intellectual currents as well as the social and political developments. Meets three hours a week, or equivalent.

GERMAN 161
German Classicism and Romanticism 3 credits
(Prerequisites: German 101-102, or equivalent) A study of the literature of the 18th (Goethe, Schiller, Holderlin) and early 19th century (Kleist, Hoffmann, Novalis) in their Classical and Romantic contexts. Meets three hours a week, or equivalent.

GERMAN 162
Realism and Naturalism 3 credits
(Prerequisites: German 101-102, or equivalent) A study of the works of late 19th century authors, such as Storm, Fontane, and Keller. Meets three hours a week, or equivalent.

GERMAN 171
German Literature up to 1945 3 credits
(Prerequisites: German 101-102, or equivalent) An in-depth study of such authors as Brecht, Mann, Kafka, and Rilke. Meets three hours a week, or equivalent.

GERMAN 172
Postwar German Literature 3 credits
(Prerequisites: German 101-102, or equivalent) Concentration on contemporary authors such as Frisch, Durrenmatt, Grass and Boll, as well as representative authors from East Germany. Meets three hours a week or equivalent.

GERMAN 175-176
Scientific German I-II 6 credits
(Prerequisites: None) Readings in the literature of chemistry, physics, and the biological sciences. The object of the course is to enable students to use German source material in their scientific work.

GERMAN 181-182
Advanced Stylistics 6 credits
(Prerequisites: German 101-102, or equivalent) Advanced study of syntax and semantics aimed at the development of stylistic sensitivity. Interdisciplinary textual analyses (business and commercial German communications media, the sciences and humanities) for further practice in composition and conversation. Meets three hours a week, or equivalent, and one hour weekly independent language laboratory practice.

GERMAN 183
Business German 3 credits
(Prerequisites: German 101-102, or equivalent) Overview of the spoken and written language of the German business world. Formalities and conventions of letter writing, banking, import/export, and other commercial transactions. Analysis of terminology from business-related areas such as finance, insurance, and international commerce within a contemporary cultural setting. Meets three hours a week, or equivalent.

GERMAN 191-192
Independent Study Variable Credit
(Prerequisites: German 101-102, or equivalent) A tutorial program open to junior and senior students only. Content determined by mentor.

ITALIAN

ITALIAN 1-2 6 credits
Elementary Italian
Introduction to the Italian language. Designed for beginners. Meets four hours a week, or equivalent.

ITALIAN 23-24 6 credits
Intermediate Italian
(Prerequisites: Italian 1-2, or equivalent) Grammatical review, written and oral composition with selected cultural readings of intermediate difficulty. Meets four hours a week, or equivalent.

JAPANESE

JAPANESE 1-2 6 credits
Elementary Japanese
Development of the fundamental skills, listening, speaking, reading and writing, with emphasis on language performance. Emphasis on practical application of the basic skills for business related activities. Relevant cultural aspects are introduced. Designed primarily for students with no background in the Japanese language.

PORTUGUESE

PORTUGUESE 1-2 6 credits
Elementary Portuguese
Introduction to the Portuguese language. Designed for beginners. Meets four hours a week, or equivalent.

RUSSIAN

RUS 1-2 Prof. Peregrim
Elementary Russian 6 credits
Primary emphasis on developing the skills of understanding, speaking, reading and writing of Great Russian. A new modern concept entitled "Total Physical Response" used to expand aural comprehension. A thorough and continual study of the Cyrillic alphabet is an integral part of the course's content. Tapes to enhance listening and speaking skills available in lab or for home use.

RUS 23-24 Prof. Peregrim
Intermediate Russian 6 credits
(Prerequisites: Rus. 1-2 or equivalent) This course continues development of the four major skills: listening, speaking, reading, and writing. It builds on the grammatical concepts learned in Russian 1 and 2 and provides a solid foundation for the student interested in visiting the Soviet Union and/or in reading the Russian Classics, contemporary literature, and newspapers. Grammar is taught functionally. Writing, both structured and unstructured, is given emphasis. Meets four hours a week, or equivalent.

SLAVIC

SLAV 107 Dr. Petrovic
Masterworks of Russian & Slav Literature 3 credits
A survey of major literary achievements of Slavic peoples. Dostoyevsky, Tolstoy, Cosic, Sienkiewicz and Solzhenitsyn will be read. No knowledge of Slavic languages is requried. All readings and lectures are in English (GE AREA IV)

SPANISH

SPANISH 1-2
Elementary Spanish 6 credits
(Prerequisite: None) Fundamentals of grammar, drill in pronunciation, conversation, suitable readings and written exercises. Designed primarily for students with no or insufficient background in the Spanish language. Meets four hours a week, or equivalent.

SPANISH 23-24
Intermediate Spanish 6 credits
(Prerequisites: Spanish 1-2, or equivalent) Grammatical review, written and oral composition with selected cultural readings of intermediate difficulty. Meets four hours a week, or equivalent.

SPANISH 100
Medical Spanish 3 credits
(Prerequisites: Spanish 23-24, or equivalent) Designed for the student who plans to work in any area of health care, this course focuses on the needs and problems of Spanish-speaking patients. Students will learn specialized vocabulary and improved communicative ability through conversation and composition. Through films and on-site hospital visits, students will develop an increased awareness of health issues often of particular concern to Hispanics. Spanish 102 is the sequence to this course. Meets four hours a week, or equivalent.

SPANISH 101-102
Advanced Composition and Conversation 6 credits
(Prerequisites: Spanish 23-24, or equivalent) A thorough study of Spanish grammar, composition, oral and written, with the aim of developing ability to write clear and fluent Spanish. Practice in oral composition. Meets three hours a week or equivalent, and a one hour weekly independent language laboratory practice.

SPANISH 110
Introduction to Literature 3 credits
(Prerequisites: Spanish 101-102, or equivalent) An introduction to the principal genres of literature (poetry, short story, essay, drama and novel) through analysis of representative works in the Hispanic tradition. Required for all upper-division literature courses.

SPANISH 111
Spanish Culture and Civilization 3 credits
(Prerequisites: Spanish 101-102, or equivalent) An overview of the diverse historical, political, religious, and artistic factors that have determined the cultural make-up of the peoples of the Iberian peninsula. Meets three hours per week or equivalent.

SPANISH 112
Topics in Latin-America Culture and Civilization 3 credits
(Prerequisites: Spanish 101-102, or equivalent) The course examines the unique cultural and historical features of one specific region (the Andean countries, the Caribbean, Central America, Mexico, and the Southern Cone) and focuses, as well, on the cultural, linguistic, and religious traits shared with the other areas. Content will vary according to the cultural/geographic region examined, and course therefore may be repeated for credit.

SPANISH 115-116
History of Spanish Literature 6 credits
(Prerequisite: Spanish 110) Study of Spanish literature from Cantar de Mio Cid to XXth century, with emphasis on main literary currents in each century. Meets three hours a week, or equivalent.

SPANISH 117-118
Survey of Spanish-American Literature 6 credits
(Prerequisite: Spanish 110) A survey of Spanish-American literature from the 16th century to the present, with representative readings from each of the principal cultural areas. Meets three hours a week, or equivalent.

SPANISH 121
XXth Century Spanish Drama 3 credits
(Prerequisite: Spanish 110) Peninsular drama of the XXth century including dramatic forms after Buero Vallejo and new directions of Spanish theater in post-Franco era.

SPANISH 122
Spanish American Drama 3 credits
(Prerequisite: Spanish 110) Spanish American drama from the late XIXth century to the present, with emphasis on contemporary trends. Meets three hours a week, or equivalent.

SPANISH 125
Contemporary Issues 3 credits
(Prerequisites: Spanish 101-102 or equivalent) A conversation-intensive course. Discussion and reports based on readings in a broad range of current periodicals and focusing on issues of relevance to the Hispanic world and to the particular career or interest areas of students.

SPANISH 140
Hispanic Detective Fiction 3 credits
(Prerequisite: Spanish 110) An examination of the two schools of detective fiction (the hard-boiled and the puzzle) in Hispanic literature (short story and novel).

SPANISH 161-162
Modern Spanish Prose 6 credits
(Prerequisite: Spanish 110) The short story and the novel in Spain in the late 19th and early 20th centuries. Meets three hours a week, or equivalent.

SPANISH 163-164
The Spanish American Novel 6 credits
(Prerequisite: Spanish 110) An examination of the esthetic, cultural and social aspects of prose fiction in Latin America over the past two hundred years. Meets three hours a week, or equivalent.

SPANISH 165-166
The Generations of 1898 6 credits
(Prerequisite: Spanish 110) Thorough examination of the movement, its political, historical, and social background: Ganivet, Unamuno, Azorin, etc. Meets three hours a week, or equivalent.

SPANISH 167-168
Spanish American Short Story 6 credits
(Prerequisite: Spanish 110) The development of the short story as a literary genre in Spanish America from the beginning of the 19th century to the present. Meets three hours a week, or equivalent.

SPANISH 171
Hispanic Lyric Poetry 3 credits
(Prerequisite: Spanish 110) The development of lyric poetry in the Spanish-speaking world. Examples of early poetry in Spain and Spanish America are studied to establish an awareness of the Hispanic lyric tradition, but the main focus of the course is on 20th century Spanish America and such figures as Gabriela Mistral, Pablo Neruda, and Cesar Vallejo.

SPANISH 172
The Hispanic Satirical Tradition 3 credits
(Prerequisite: Spanish 110) An examination of satirical writings beginning with Juan Ruiz, Quevedo, and Sor Juana Ines de la Cruz, and continuing through such modern masters as Pio Baroja, Garcia Marquez, and Juan Jose Arreola.

SPANISH 173
The Literature of Social Protest 3 credits
(Prerequisite: Spanish 110) Serious social and political literature in Spain and Spanish America.

SPANISH 181-182
Advanced Stylistics 6 credits
(Prerequisites: Spanish 101-102, or equivalent) Designed to achieve more sophisticated use of Spanish, both verbally and in writing. Includes intensive examination of compositions and translation exercises, as well as discussion of areas of particular difficulty for the non-native speaker (e.g. false cognates and unfamiliar structures.)

SPANISH 183
Business Spanish 3 credits
(Prerequisites: Spanish 101-102, or equivalent) Overview of the spoken and written language of the Spanish business world. Formalities and conventions of letter writing, banking, import/export, and other commercial transactions. Analysis of terminology from business-related areas such as finance, insurance, and international commerce within a contemporary cultural setting. Meets three hours a week, or equivalent.

SPANISH 191-192
Guided Independent Study Variable Credit
(Prerequisites: Spanish 101-102, or equivalent) A tutorial program open to junior and senior students only. Content determined by mentor.

CLASSICAL LANGUAGES

GREEK

GREEK 1-2
Elementary Greek 6 credits
An intensive course in the fundamentals of Classical Greek grammar.

GREEK 23-24
Intermediate Greek 6 credits
(Prerequisites: Greek 1-2 or equivalent) Review of fundamentals. Readings from Zenophon, Euripides, and the New Testament.

GREEK 101
Homer 3 credits
(Prerequisites: Greek 23-24 or equivalent) Selected readings from the Iliad and the Odyssey. An appreciation of the diction, thought and beauty of Homer.

GREEK 102
Thucydides 3 credits
(Prerequisites: Greek 23-24 or equivalent) Evaluation of fifth century Athens and of Thucydides as philosopher and historian. Readings from the History of the Peloponnesian War.

GREEK 105
Plato 3 credits
(Prerequisites: Greek 23-24 or equivalent) Readings of the *Apology.* A philosophical, historical and literary analysis of Plato and Socrates. Supplementary reading in the Crito and Phaedo.

GREEK 106
Euripides 3 credits
(Prerequisites: Greek 23-24 or equivalent) Reading and analysis of the *Medea* with an evaluation of the art and thought of Euripides.

GREEK 107 3 credits
Sophocles
(Prerequisites: Greek 23-24 or equivalent) Evaluation of Sophocles as a poet, dramatist and thinker through a study of the *Oedipus Tyrannus.*

GREEK 108 3 credits
Demosthenes
(Prerequisites: Greek 23-24 or equivalent) An analysis of the *De Corona* as a model of rhetoric. Consideration of the rhetorical norms established by Aristotle.

GREEK 109-110 3-6 credits
Readings in Greek Literature
(Prerequisites: Greek 23-24 or equivalent) Selections from Greek writers to suit the student's special interest.

GREEK 111
Classical Greek Literature and Mythology 3 credits
This course examines the role that mythology played in Greek literature, and examines the changing attitudes of the Greeks towards the Olympian gods from Homer to the 4th century B.C. All readings and lectures in English.

GREEK 120
Ancient Civilization: Greece 3 credits
The political, constitutional, and cultural history of Greece from the earliest times to the death of Alexander the Great. All readings and lectures in English.

GREEK 125 Dr. Petrovic
Legacy of Greece and Rome 3 credits
Survey of the artistic and cultural treasures of classical Greece and Rome with a focus on their enduring legacy in our own civilization.

GREEK 145
Roots of Greek in English 3 credits
The relationship of both Greek and English to the other languages of the Indo-European family; the Greek elements that have come into English are presented: e.g., bases, prefixes, numerals, hybrids, etc. A study of the 20-25% English words which come from Greek, particularly in scientific fields.

GREEK 191-192
Guided Independent Study Variable Credit
(Prerequisites: Greek 23-24 or equivalent) A tutorial program open to junior and senior students only. Content determined by mentor.

LATIN

LATIN 1-2
Elementary Latin 6 credits
An intensive course in the fundamentals of Latin. Reading and composition.

LATIN 23-24
Intermediate Latin 6 credits
(Prerequisites: Latin 1-2 or equivalent) Review of fundamentals. Reading of selections from Caesar, Cicero and Virgil.

LATIN 101
Horace and Juvenal 3 credits
(Prerequisites: Latin 23-24 or equivalent) A study of Roman satire revealing the life, manners and thought of the times.

LATIN 103
Cicero and Lucretius 3 credits
(Prerequisites: Latin 23-24 or equivalent) Selections from the *Tusculan Disputations* and the *De Rerum Natura* illustrate constrasting developments in Roman thinking. The course includes a brief survey of ancient philosophy.

LATIN 104
Christian Latin Literature 3 credits
(Prerequisites: Latin 23-24 or equivalent) Selections from Christian Latin writers with concentration on the *Confessions* of St. Augustine.

LATIN 107
Livy and Virgil 3 credits
(Prerequisites: Latin 23-24 or equivalent) Selections from Livy I and XXI, and from Books VII-XII of Virgil's *Aeneid*.

LATIN 108
Horace and Catullus 3 credits
(Prerequisites: Latin 23-24 or equivalent) Lyric poetry illustrated by the *Odes* of Horace and selected poems by Catullus.

LATIN 109-110
Readings in Latin Literature 3-6 credits
(Prerequisites: Latin 23-24 or equivalent) Selections from Latin writers to suit the student's special interest.

LATIN 111
Classical Roman Literature and Mythology 3 credits
The course examines the role that mythology played in Roman literature, and examines the changing attitudes of the Romans towards the divinities manifested in literature from Plautus to Apuleius. All readings and lectures in English.

LATIN 112
Medieval Latin 3 credits
(Prerequisites: Latin 1-2 or equivalent) Introduction to medieval Latin. Readings in medieval prose and poetry from the ninth to the fifteenth centuries.

LATIN 113
History of Latin Literature 3 credits
A survey of Roman and post-Roman Latin literature. The course is taught in English. No Latin prerequisite.

LATIN 120
Ancient Civilization: Rome 3 credits
The political, constitutional, and cultural history of Rome from the earliest times to the end of the Western empire. All readings and lectures in English.

LATIN 145
Roots of Latin in English
The relationship of both Latin and English to the other languages of the Indo-European family; the Latin elements that have come into English are presented: bases, prefixes, numerals, hybrids, etc. Approximately 60-65% of English words come from latin.

LATIN 191-192
Guided Independent Study Variable Credit
(Prerequisites: Latin 23-24) A tutorial program open to junior and senior students only. Content determined by mentor.

LINGUISTICS

LANG. 104
World of Language 3 credits
(No prerequisite) Designed to provide students with a broad overview of the nature and function of languages. Topics include theories on the origin of languages, evolution and change in language, the importance of language in human society, culture, contemporary politics, and the business world; and identifying successful approaches to language study.

LANG. 184
Introduction to Linguistics 3 credits
Inquiry into the nature of language, its various systems manifested by the principal languages of the world. Principles of structural analysis. Open to language and non-language majors. No prerequisite.

HISTORY

DR. DeMICHELE, *Chairperson*

The department aims: 1. to train the student in solid historical methodology; 2. to present history as the study of interdependent human activities and concrete events which have social significance; 3. to engender an intelligent and critically sympathetic understanding of various civilizations and cultures.

The department offers a special program that enables qualified students to obtain both their Bachelor and Master's degree within four calendar years. The program utilizes Intersession or summer sessions and the use of four graduate courses as part of the undergraduate program. The chairperson of the department should be contacted for details of the program.

See the Pre-Law section earlier in the catalog for details of the department's success in this area.

	Dept. and No.	Descriptive Title of Course	Credits	
		FRESHMAN	FALL	SPRING
MAJOR	History 3-4	Europe: 1500 to Present	3	3
MAJOR	History 1-2	United States History	3	3
COGNATE	Elective	Electives**	3	3
GE AREA III	Communications	Electives***	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	History	Electives*	3	3
COGNATE	Electives	Electives**	3	3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA III	Communications	Elective***	3	
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS 22	Theology II	3	
GE FREE	Elective	Elective		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	History	Electives	3	3
COGNATE	Electives	Electives**	3	3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA II	Social/Behavior	Electives	6	3
GE AREA V	Phil-T/RS	Philosophy and/or Religious Studies	3	3
GE FREE	Elective	Elective		3
			18	15
		SENIOR		
MAJOR	History	Electives	6	6
COGNATE	Electives	Electives**	3	3
GE AREA II	Social/Behavior	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE FREE	Elective	Elective		3
			15	15
			TOTAL: 127 credits	

* Department recommends Hist 100. Research Methods for Sophomore History majors

** Students may use cognate electives to develop a second major

*** Unless exempted from the University requirements, students are to take Comm. 2 and Engl. 7.

MINOR. A minor in History (18 credits) should include History 1, 2, 3 and 4 plus any two additional history courses.

HIST. 1-2 Staff
History of the United States 6 credits
The United States from the time of its European beginnings to the present with special emphasis on the history of Pennsylvania; colonial origins to Reconstruction; Gilded Age to the modern era.

HIST. 3-4 Staff
Europe, 1500 to the Present 6 credits
European history with concentration upon the political aspects of European development. The rise of national monarchies; political, social, economic, and intellectual developments; industrialism, the new nationalism and liberalism.

HIST. 100 Dr. Homer
Research Methods: The Historian at Work 3 credits
Introduction to the techniques of historical research including the use of library and bibliographical materials, the use and interpretation of evidence, and the preparation of written papers. Course is designed to assist any student, regardless of major, who wishes to improve research and term paper skills.

HIST. 101-102 Fr. Scott
Ancient History 6 credits
The rise of civilization in Mesopotamia, Egypt, the Indus Valley and the Mediterranean world; growth of civilization in China and India; the rise of Greece and Hellenism; Rome from Republic to Empire; the barbarians and the end of ancient culture; the origins of Christianity; pre-Colombian civilization in the New World.

H/PS 103 Dr. Feller
Saving America's Past 3 credits
Introduction to problems of the changing urban-suburban environment. Using Lackawanna County as a model study region, the issues of urban planning, architectural recycling, historic preservation and citizen awareness will be explored. Walking tours of Scranton and surrounding communities.

HIST. 104 Dr. Feller
American Decorative Arts 3 credits
Introduction to the sources of American decorative and folk arts and interior architecture from the Boston Tea Party to the Philadelphia Centennial Exhibition. The arts themselves and evolution and development of American tastes will be examined as primary source material for the cultural historian, reflective of contemporaneous socio-political trends. Visits to public collections in the region.

HIST. 105 Dr. Homer
History as Biography 3 credits
An exploration of the nature of biography and its relationship to the study of the past. Biographies of several major figures from the modern era will be read and studied to exemplify different biographical techniques and their utility as means of historical inquiry.

HIST. 110-111 Fr. Scott
Medieval History 6 credits
The civilization of medieval Christendom from the fall of the Roman Empire to the beginning of the fourteenth century; its religious, social, economic, cultural and political aspects; the relationship between church and society, belief and life style, ideal and reality; the interaction between Western Christendom, Byzantium and Islam.

HIST. 112-113 Fr. Scott
Renaissance and Reformation 6 credits
Europe in transition from medieval to modern (from the beginning of the fourteenth century to the middle of the seventeenth century); the decline of medieval civilization; the Renaissance, the shattering of Christian unity in the Protestant Reformation; the Catholic response; the age of exploration; the struggle for empire.

HIST. 114 Prof. Williams
French Revolution to 1815 3 credits
Historical antecedents; the philosophies; the republicanism and the fall of the monarchy; Reign of Terror; the Directory; Napoleon; internal achievements; significance of the Spanish and Russian Campaigns; and War of Liberation.

HIST. 115 Prof. Williams
Europe, 1815-1875 3 credits
The congress of Vienna and the European restoration; Industrialism, Liberalism, Socialism, and Nationalism; the revolutions of the 1840's; the unification of Italy and the German Empire; Russia and the Lesser States of Europe; the Third French Republic.

HIST. 116 Prof. Williams
Europe, 1875-1918 3 credits
The domestic problems confronting France, Italy, Germany, Central and Eastern Europe, and Russia. Competition for colonies and markets; the growth of alliances; World War I and the Treaty of Versailles. The Russian Revolution and Communism.

HIST. 117-118 Dr. Earl
Twentieth Century Europe 6 credits
World War I Treaty of Versailles; Russia becomes the USSR; the European struggle for security; Italian

Fascism; Rise of Nazi Germany; Asia between the two wars. World War II, loss of colonial empires in Africa and Asia; development of the Cold War; Marshall Plan and NATO.

HIST. 119 Dr. DeMichele
Rebels, Robbers, Rogues 3 credits
A sociological and psychohistorical approach to those folk heroes, political "expropriators" and bandits whose spectacular exploits have been romanticized and preserved through the centuries. Figures such as Robin Hood, Cartouche, Pancho Villa, Jesse James, Che Guevara and others will be considered.

H/PS 120-121 Dr. Hueston
American Diplomatic History 6 credits
(Recommended for Background: History 1 & 2) A study of American diplomatic history and principles. The Revolution. Early American policies on isolation and expansion. The War of 1812. The Monroe Doctrine. Manifest Destiny. The Civil War. American imperialism and the Spanish-American War. Latin American diplomacy in the twentieth century. World War I. Attempts to preclude further war. World War II. Cold War. Contemporary problems.

H/PS 122-123 Prof. Scully
American Constitutional and Legal History 6 credits
(Recommended for Background: History 1 & 2; H/PS 122 is prerequisite for H/PS 123) The juridicial concepts of the colonial and revolutionary periods; backgrounds of the Federal Convention; the nature of the constitution, its interpretation by Marshall and Taney. The constitutional problems occasioned by the Civil War, the new amendments; the role of the States in a Federalist system. Key cases will be analyzed in detail and set in their proper historical perspective.

HIST 124 Staff
Seminar in European History 3 credits
(Restricted to Senior History Majors and 4-year BA/MA History students) An analysis of selected topics in European history from the fifteenth to the twentieth century. Extensive readings. Historical research and writing stressed.

HIST 125 Staff
Seminar in American History 3 credits
(Restricted to Senior History Majors and 4-year BA/MA History students) An analysis of selected topics in American history from the Colonial era to the present. Extensive readings. Historical research and writing stressed.

H/PS 128 Dr. DeMichele
Britain: Past and Present 3 credits
Combines with travel experience in Great Britain to introduce the student to the major historical, cultural, political, economics and social events in Britain's past and present.

HIST. 130-131 Dr. Feller
Twentieth Century United States 6 credits
An intensive study of American Development from 1900 to the present. Stress will be placed on the Roosevelt Era and its Progressivism. Wilson's New Freedom; diplomacy of the First World War; the return to "normalcy"; the Great Depression and the New Deal; Roosevelt and world politics; origins and consequences of World War II. The Truman Era.

H/SO 134 Dr. Feller
Introduction to Archaeology 3 credits
An introduction to the study of archaeology from the anthropological and historical perspectives. The problems of survey and site recognition, excavation planning, record keeping, treatment of artifacts, and interpretation will be explored. Problems of aboveground archaeology examined.

HIST. 135 Dr. Homer
Europe in the Age of Absolutism 3 credits
(Recommended for Background: History 3) A study of the major political, social, economic and intellectual movements in Europe from the rise of royal absolutism until the outbreak of the French Revolution.

HIST. 136-137 Dr. Hueston
American Ideas and Culture 6 credits
(Recommended for Background: History 1 & 2) History of American art, architecture, literature, and thought. Colonial Developments. The American Enlightenment. The emergence of a national culture. Romanticism. Post-Civil War. Realism in American art and literature. The intellectual response to the industrial order. The American mind in the 1920's. The intellectual and cultural response to the depression. Post-World War II developments.

HIST. 138 Dr. Conover
The American West 3 credits
A study of acquisition, settlement, and development of the Trans-Mississippi West, including the mining, cattleman's and farmers' frontiers; Indian removal, and Manifest Destiny in Texas and Oregon.

HIST. 140 Dr. DeMichele
England, 1485 to 1714 3 credits
The end of the Wars of the Roses; Tudor Absolutism, Henry VIII and Reformation; Elizabeth I; Renaissance and Elizabethan Music and Literature; The Stuarts; Colonialism; Commonwealth; Restoration; the Revolution of 1688; Reign of Anne.

HIST. 141 Dr. DeMichele
England, 1714 to Present 3 credits
Parlimentary rule; Cabinet government; Political parties; Industrial Revolution; 19th Century reforms; building of a British Empire; World War I; problems of readjustment; World War II; Britain and the world today.

H/PS 142 Dr. DeMichele
English Constitutional and Legal History to 1485 3 credits
Anglo-Saxon basis; fusion of Anglo-Saxon and Norman political institutions; Angevin innovations; Magna Carta; concept of representation; beginnings of the Common Law; jury system; emergence of Parliament.

H/PS 143 Dr. DeMichele
English Constitutional and Legal History, 1485 to Present 3 credits
Tudor absolutism, struggle between royal prerogative and Parliament; rise of House of Commons; Parliamentary supremacy after 1688; development of Cabinet government; democratic reforms; Parliamentary Bill of 1911; extension of administrative law.

H/PS 148 Dr. Homer
War and Modern Society 3 credits
(See description under Political Science.)

HIST. 149 Dr. Dougherty
America's Military Heritage 3 credits
Tells how events and leaders have influenced the development of the U.S. armed forces, showing that despite changing weapons and battlefield, the principles of warfare remain as valid in today's strategy and planning as ever.

HIST. 150 Dr. Earl
Imperial Russia 3 credits
From the crystallization of political forms in the 9th century through the Kievan State, Mongolian Invasion, rise of Muscovy to the Eurasian Empire from the 17th to the end of the 19th century.

HIST. 151 Dr. Earl
Russian Revolution and Aftermath 3 credits
A study of the development of radical thought in 19th and 20th century Russia. Analysis of various factors and forces at work in revolutionary Russia. Lenin, War Communism, NEP, Stalin.

H/PS 152 Dr. Earl
Soviet Foreign Policy 3 credits
(See description under Political Science.)

H/PS 154 Dr. Harris
Women in the Work Force 3 credits
(See description under Political Science.)

HIST. 155-156 F. Scott
Byzantine Civilization 6 credits
The Byzantine Empire from its origins in the Fourth century to its collapse in the 15th; the political and economic growth of the Empire with emphasis on its art and religion.

HIST. 161-162 Prof. Williams
Latin America History 6 credits
Pre-Colombian America; the Spanish and Portuguese Colonial area, developments to the early nineteenth century. The Latin American Republics, Castroism, The Alliance for Progress, with special stress on inter-American problems.

HIST. 165 Dr. Homer
Modern Germany: Unification & Empire 3 credits
The 1815 Confederation; 1848 and the failure of liberalism; the Age of Bismark; Wilhelm II and the "New Course", World War I and the Collapse of the Empire.

HIST. 166 Dr. Homer
Modern Germany: the 20th Century 3 credits
The troubled birth of the Weimar Republic: the Ruhr Crisis; the Stresemann Era; economic collapse and the rise of Nazism; the Third Reich, and World War II; the two Germanies and the "economic miracle."

HIST. 170 Dr. Champagne
Colonial America, 1607-1763 3 credits
The European background of the Age of Discovery; the founding of the British-American colonies; their political, economic and cultural development; British colonial policy and administration; the development of an American civilization.

HIST. 171 Dr. Champagne
American Revolution, 1763-1789 3 credits
Background to the War for Independence; British imperial policy; the development of economic and ideological conflicts; the military contest; British ministerial policy and the parliamentary opposition; the Confederation; the formation of the Constitution.

HIST. 173 Dr. Champagne
The Early National Period of American History, 1789-1824 3 credits
Beginning of the New Government; Politics and diplomacy in the Federalist Era; Jeffersonian Democracy; the War of 1812; Nationalsim and Sectionalism, Marshall and the rise of the Supreme Court.

HIST. 174 Dr. Champagne
The Age of Andrew Jackson, 1824-1850 3 credits
Politics and Society in the Jacksonian Era, Slavery and the Antislavery Crusade, American Expansion in the 1840's; the Mexican War; the Emergence of the Slavery Issue.

HIST. 175 Fr. Masterson
Civil War & Reconstruction 3 credits
Crisis Decade, disintegration of national bonds; The War: resources, leadership, strategy, politics, monetary policy, diplomacy; Reconstruction: realistic alternatives, Presidential and Congressional phases, effects in North and South.

H/PS 176 Dr. DeMichele
World Politics 3 credits
(See description under Political Science.)

HIST. 177 Dr. Hueston
History of United States Immigration 3 credits
(Recommended for Background: Hist. 1 and Hist. 2) A study of immigration to the United States with emphasis on the period from the Revolution to the restrictive legislation of the twentieth century. Motives and characteristics of immigration. Experiences of newcomers.

HIST. 178 Dr. Hueston
A History of American Assimilation 3 credits
(Recommended for Background: Hist. 1 and Hist. 2) The history of assimilation (or adjustment) of immigrants to American life. Nativism from pre-Civil War days to the 1920's. The "Old Immigration" and the "New Immigration" considered in the social, political, economic, and religious contexts of their eras. Special problems of the second generation from the 1850's to the 1960's.

H/PS 179 Prof. Williams
The Third World 3 credits
A study of the developing nations with the developed industrial nations in the contemporary world.

HIST. 180 Dr. DeMichele
Great Discoveries 3 credits
Historical analysis and assessment of the great scientific discoveries and technological developments of mankind from the Age of the Renaissance to the Space Age.

H/PS. 181 Dr. Parente
Modern China 3 credits
Study of modern Chinese society and politics from the Revolution of 1911 to the present with an emphasis on recurrent problems of modernization as well as contemporary ideologies and institutions within the People's Republic of China.

HIST. 182 Prof. Williams
World War II, Cold War & Detente 3 credits
The diplomacy of World War II; the development of the Cold War between the U.S. and the U.S.S.R. and the adoption of the policy of Detente.

HIST. 185 Dr. Earl
Total War 3 credits
Examination of the tactics, strategy, and global significance of World War II. The logistics and scope of the conflict. Importance of propaganda, patriotism and the people. Film-seminar approach. Film fee.

H/PS 188 Drs. Earl, DeMichele
Ethnic & Racial Minorities in Northeastern Pennsylvania 3 credits
Film-seminar approach to study of various ethnic groupings in Northeastern Pennsylvania. Seeks to achieve better understanding of the immigrant's problems and his accomplishments through use of documentary and feature films.

H/Geog. 189 Dr. Conover
Cultural Geography 3 credits
Study of the influence of geography on the origin, structure, and spread of culture. Focuses on describing and analyzing the ways language, religion, economy, government and other cultural phenomena vary or remain consistent from place to place.

Former House Speaker and Mrs. "Tip" O'Neill receive honorary degrees.

MATHEMATICS

DR. BEIDLER, *Chairperson*

Besides pursuing a classical undergraduate degree in mathematics, mathematics majors can take major and cognate courses in some of the fastest growing areas related to mathematics. These include courses in statistics, actuarial mathematics, and computer science. The usual cognates for mathematics majors are computer science and the natural sciences. With the permission of the department chairperson, other cognates may be chosen.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Math 12-14	Discrete-Analysis I	4	4
COGNATE	CMPS 24-25	Computer Science I-II	3	4
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20	Into. to Phil.	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph. Ed.	Phys. Educ.	1	1
			17	18
		SOPHOMORE		
MAJOR	Math 21-22	Analysis II-III	4	4
MAJOR	Math 111	Linear Algebra		3
COGNATE	Phys. 11-12	Elements of Phys. I-II	4	4
GE AREA II	Soc./Behavior	Electives	3	3
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities	Electives		3
GE AREA V	T/RS 22	Theology II	3	
PHYS EDUC	Ph. Ed.	Phys Educ.	1	1
			18	18
		JUNIOR		
MAJOR	Math 106	Real Analysis I	3	
MAJOR	Math 108	Modern Algebra	3	
MAJOR	Math Elec	Electives		6/7
COGNATE	Electives	Electives	3	3
GE AREA II	Soc./Behavior	Electives	3	3
GE AREA IV	Phil. 110	Ethics	3	
GE FREE	Electives	Electives	3	3
			18	15/16
		SENIOR		
MAJOR	Math 102	Probability	3	
MAJOR	Math Elec.	Electives	3	3
COGNATE	Electives	Electives	3	3
GE AREA IV	Humanities	Electives	3	6
GE AREA V	Phil.-T/RS	Phil. &/Or T/RS	3	3
			15	15

TOTAL: 134/135 credits

Electives for Mathematics majors: Major electives are selected from mathematics courses numbered above Math 100; also Phys 118, Phys 153, Cmps 130 or Cmps 160. A student must select as an elective at least one of the following: Math 104, 107, 120, 121, or 122. A student who takes Math 10 and 11 as a freshman may count these courses as 4 credits to replace MATH 12 and 2 credits of major elective. Additional courses numbered under Math 100 may be taken as free electives but not as major electives.

MINOR. Mathematics minor must include Math 14, 21,22, and 111 and two additional electives chosen from mathematics courses numbered over 100 or Phys 118.

MATH 1-2*
Math Discovery 6 credits
Study of fundamental ideas of the science of mathematics. Applications of mathematics in social and management sciences used to furnish foundation for an appreciation of the influence of mathematics in our society.

MATH 5
Algebra 3 credits
A study of algebra including factoring, exponents, radicals, graphing, and linear and quadratic equations. Enrollment is restricted to Dexter Hanley College students required to take Math 6, but who are limited in algebra skills. (Permission of the Dean of the Dexter Hanley College is required in order to enroll in this course. Credits count only as free elective.)

MATH 6-7
Quantitative Methods I-II 6 credits
Functions and graphs, matrix methods, differential and integral calculus including applications to management problems.

MATH 8
Mathematics of Finance 3 credits
Introductory theory of interest, accumulation and discount, present value, future value, annuities, perpetuities, amortizations, sinking funds, and depreciation schemes. Prerequistie: Math 7 or 14.

MATH 10-11
Discrete Mathematics I-II 6 credits
For computer science majors. With selected topics from algorithm analysis, mathematical logic, induction, discrete number systems, basic combinatorics, difference equations, discrete probability, graph theory, and recursion.

MATH 12
Discrete Structures 4 credits
A study of symbolic logic, sets, combinatorics, mathematical induction, recursion, graph theory and trees. Intended for mathematics majors, but open to other qualified students.

MATH 13
Pre-Calculus Mathematics 4 credits
An intensified course covering the topics of algebra and trigonometry.

MATH 14
Analysis I 4 credits
The beginning of a twelve credit sequence covering the topics of calculus and analytic geometry. Limits, differentiation, integration, Fundamental Theorem.

MATH 21-22
Analysis II and III 8 credits
An integrated course covering the topics of calculus and analytic geometry using modern methods. Prerequisite: Mathematics 14.

MATH 42
History of Math 3 credits
Important mathematical discoveries in their historical context; the works of some prominent mathematicians and the practical significance of their accomplishments. (GE AREA I only)

MATH 44
Special Topics of Statistics 3 credits
Study of the computational aspects of statistics; hypothesis testing, goodness of fit; non-parametric tests; linear and quadratic regression, correlation and analysis of variance. (GE Area I only)

MATH 46
Theory of Games 3 credits
Study of game theory concentrating on its most elementary aspects. Attention paid to two-person zero-sum games of perfect information. (GE Area I only)

MATH 101
Differential Equations 4 credits
Treatment of ordinary differential equations with applications. Prerequisite: Math 22.

MATH 102
Probability Theory 3 credits
Basic concepts of probability theory, random variables and their distribution functions; limit theorems and Markov chains. Prerequisite: Math 21.

MATH 104
Statistics 3 credits
Measure of central tendency measure of dispersion, continuous random variables, expected value, moments, confidence intervals, hypothesis testing, regression, and correlation. Prerequisite: Math 102.

MATH 105
Geometry 3 credits
Euclidean, non-Euclidean, and projective geometry. Transformation and invariants.

MATH 106
Real Analysis I 3 credits
Topics include: real number line, Heine-Borel and Bolzano-Weierstrass Theorems, functions, limits, continuity, absolute and uniform continuity, differentiation, integration theory, sequences and series, and uniform convergence. Prerequisite: Math 22.

*Once a student receives credit for a mathematics course numbered above Math 2, that student may not register for either Math 1 or Math 2.

MATH 107
Real Analysis II 3 credits
Topics to build upon the material covered in Math 106.

MATH 108
Modern Algebra 3 credits
Fundamental ideas and properties of groups, rings, fields, and polynomials over a field. Prerequisite: Math 111.

MATH 111
Linear Algebra 3 credits
Vector spaces, matrices, determinants, linear transformations, eigenvalues, eignevectors, inner products, and orthogonality. Corequisite: Math 22.

MATH 116-117
Special Topics 3 credits each
Topics and prerequisites will be announced prior to preregistration.

MATH 120
Topology 3 credits
Topological spaces: connectedness, compactness, separation axioms, and metric spaces. Prerequisite: Math 106.

MATH 121
Complex Variables 3 credits
The theory of complex variables: the calculus of functions of complex variables, transformations, conformal mappings, residues, and poles. Prerequisite: Math 22.

MATH 122
Vector Calculus 3 credits
The calculus of scalar and vector fields and or functions defined on paths or surfaces. Implicit Function, Green's , Strokes', and Gauss' Theorems. Applications. Prerequisites: Math 111.

MATH 130
Actuarial Mathematics 3 credits
Theory of interest, measure, accumulation and discount, present value, future value, annuities, perpetuities, amortizations, sinking funds, and yield rates. Prerequisite: Math 21.

John Levko, S.J., Ph.D., Professor of Mathematics

MILITARY SCIENCE (Army Reserve Officer Training Corps)

LT. COL. CASEY, *Chairperson*

The primary objective of the ROTC program is to develop leadership capabilities and to train future officers for both the active and reserve components of the United States Army.

Military Science instruction for University of Scranton students is offered on campus through the Military Science Department at the University of Scranton. A two-year and four-year program are offered, both of which lead to a commission as an officer in the United States Army. To obtain this commission, qualified male and female students must successfully pass an aptitude test, a physical examination, and complete either the two or four-year progam of approved Military Science courses. While enrolled in the Advanced Courses (Military Science III and IV), the student will receive $100 per month subsistence allowance. Uniforms, equipment, and textbooks required for Army ROTC classes will be supplied by the Army. Students may compete for Army ROTC scholarships while in high school (4-year awards), or during college (3 and 2-year awards). Scholarships pay full tuition, textbooks, lab and other academic fees, plus an allowance of up to $1000 each school year.

Students qualify for advanced ROTC courses (2-year program) in three ways:

(1) On Campus Courses-most students take introductory military science courses on campus during their freshmen and sophomore years. These courses allow them to learn about the Army and the opportunities and responsibilities of an officer without incurring an obligation. This "basic" program generally involves one course per school term, although students may arrange to compress more than one of the required courses into a single term.

(2) Summer Programs-students may also qualify through a paid, six-week, no obligation summer "Basic Camp" which provides intensive military training at Fort Knox, Kentucky. Students may also compress all freshmen and sophomore military science courses during one on-campus summer session.

(3) Advanced Placement-students with prior military service, members of the United States Army Reserve or National Guard, or JROTC members may quality for advanced placement into the advanced Army ROTC courses.

TWO YEAR PROGRAM: Available to qualified students having a minimum of two academic years remaining to degree completion, and meet criteria set forth in paragraphs (2) or (3) above. Application for this program must be made prior to the end of the Spring Semester of the sophomore year for those not enrolled in previous Military Science instruction. Also available for accepted graduate students.

FOUR YEAR PROGRAM: Consists of all eight Military Science courses (commencing no later than the sophomore year). Enrollment in the first four courses of Military science (MS I & II) is accomplished in the same manner as any other college course and carries no military obligation. Application to enroll in the Advanced Military Science courses (MS III & IV) must be made while enrolled in Military Science 22.

While enrolled in the Advanced Course, each student is required to successfully complete a six-week Advanced Camp at Fort Bragg, North Carolina normally after completing Military Science 102. Transportation, food, lodging, medical and dental care, and approximately $800 pay are provided by the Army.

MS 10
Basic Course Lab 0 credits
Required of all Basic Course Students. Introduces students to tactics, leadership, marksmanship, first aid, and weapons. 2 hours; 0 credits.

MS 11-12
Military Science I 2 credits
Military history designed to provide a fundamental understanding of the Army's organization, structure, and components, and to analyze major events and influences of Army History. Examination of the formulation and implementation of national security policy will be made. The student will also gain an acquaintance of the evolution of warfare, military theory, and the military profession, with particular emphasis on leadership. 1 hour for 2 semesters.

MS 21-22
Military Science II 4 credits
Introduction to land navigation, including use of the compass and topographic maps. First aid, to include CPR (Certification available dependent upon student interest). A survey of leadership theory to include leadership models and group dynamics is held. 2 hours for 2 semesters.

MS 101
Military Science III 2 credits
(Prerequisite: MS 21-22, or equivalent) Military skills and professional knowledge subjects designed to instruct the cadet in the principles and techniques of applied leadership, advanced land navigation, and tactics. An introduction to the international agreements governing armed forces, operational planning, and the functions of command and staff. 2 hours.

MS 102
Military Science III 1 credit
Instruction designed to prepare the student for the ROTC Advanced Camp. Emphasis on applied small unit leadership, physical conditioning, practical training on military equipment, tactics and unit drill. 2 hours.

MS 121
Military Science IV. 2 credits
An examination of mid-level management considerations in the Army. The course addresses the Army's personnel, training and logistics management system. In addition, the cadet is given an overview of the American Military Justice System, the Law of War, and both legal and practical considerations in connection with apprehension and search of personnel, seizure of contraband, and individual rights. 2 hours.

MS 122
Military Science IV 1 credit
The Army Officer in Contemporary American Society. An introduction to professionalism and military ethics. Provides the cadet with an introduction to the profession, its characteristics, roles and responsibilities; a basic understanding of the professional soldier's responsibilities to the nation and the armed forces; an understanding of the needs for ethical conduct, sensitivity to ethical issues, and improved ethical decision making skills. Additionally, the course offers outside presentations in the banking and insurance fields. Moreover, a review of logistics, counseling, and written and oral communication is given. 2 hours.

MS 130
Military Science Lab 0 credits
Required for all Military Science students each semester. Stresses practical application of classroom theory and Army related subjects such as leadership, drill and ceremonies, weapons training, land navigation, first aid, mountaineering, and tactics. 2 hours.

NOTE: Students desiring to pursue Military Science studies through to a commission are also required to complete Hist. 149, American Military Heritage, or equivalent (University of Scranton). This requirement may be met during any semester.

PHILOSOPHY

DR. NORDBERG, *Chairperson*

The basic objectives of the Philosophy Department may be stated as follows:

1) To inspire the student to come to grips with the basic philosophical problems implicit in the experience of the self, others and the universe, together with the question of their relations to ultimate transcendence (God and immortality);

2) To lead the student to develop habits of clear, critical thinking within the framework of both an adequate philosophical methodology and accepted norms of scholarship;

3) To introduce the student to reading critically the great philosophers, past and present;

4) Finally, through this entire process, to help the student to formulate for himself or herself a satisfactory philosophy of life or world-view. Hopefully, such a formulation will ground both one's own search for fulfillment as a free person and one's meaningful contribution to the world community. In this fashion, the Department exercises the specifically illuminating and unifying functions of philosophy as set forth in the basic objective of liberal education adopted by this University.

For the AB degree in Philosophy, the major must take 24 upper division credits in Philosophy in addition to the six credits required of all students. As part of this 24 credits, the student is urged to take in senior year a seminar for philosophy majors. The remaining 21 credits must be distributed as follows: logic (3); history of philosophy (6); thematic or problem-centered courses (6); free (6).

Classified as history of philosophy: Phil. 27, 108, 113, 114, 117, 121, 122, 123, 125, 131, 142, 144, 145, 149, 159.

Classified as thematic or problem-centered: Phil. 27, 104, 105, 106, 107, 108, 112, 119, 124, 125, 126, 131, 132, 133, 136, 137, 139, 140, 144, 145, 146, 147, 148, 156.

PHIL. 20 Staff
Introduction to Philosophy 3 credits
The purpose of this course is to awaken the beginning student to the basic questions and answers available in philosophy. Contemporary methods are used to understand both current and classical philosophical literature. While important professional texts are used, this course is kept flexible enough to allow the individual professor to develop his own approach to philosophical problems.

PHIL. 28 Dr. Capestany
Logic: The Art of Communication 3 credits
This course will center on a study of principles of critical thinking, fallacies, degrees of certitude, syllogistic reasoning, language and thought. The practical aspect of logic as it applies to life will be stressed rather than the formal system of logic.

PHIL. 104 Dr. McGinley
Epistemology 3 credits
An historical and analytical examination of the problem of knowledge within the context of the problem of truth. Areas of investigation are authentic and unauthentic thinking and verbalization; the relationship between thought and language; the relationship between thought and experiencing; the critical status of the fundamental positions on the problem of ultimate truth.

PHIL. 105 Dr. Fairbanks
Philosophy of the Person 3 credits
This course will deal with the basic questions that confront the human person. This will involve an analysis of the social situation, a discussion of the implications of this situation for the person as he/she relates to the world, and a search for the meaning of the 'whole person'.

PHIL. 106 Dr. Black
Philosophy of Culture 3 credits
Examines the meaning of the term "culture." Explores the notions of civilization and barbarism, common principles in cultural development, and the interaction of such cultural forces as myth, magic, language, art, religion, science and technology. Special attention will be given to the question of "progress" and "regress" in culture.

PHIL. 107 Dr. Capestany
Philosophy of Law 3 credits
A study of the various justifications of law and their implications. Special consideration will be given to the problems of civil disobedience and the force of law in private institutions.

PHIL. 108 Drs. Baillie, McGinley
Metaphysics 3 credits
A textual inquiry into the adequacy of philosophers' answer to the fundamental question, "What is?". Special attention will be given to Plato, Aristotle, Aquinas, Kant's critical philosophy, and the issues of nature and history.

PHIL. 110 Staff
Ethics 3 credits
A philosophical study of our moral experience in terms of our meaning as persons. Themes investigated will include freedom of choice and its limitations in moral responsibility, problems of conscience, the meaning of moral value, the norm of morality, natural obligation and human rights and their implications for social involvement of the person and our relation to authority.

PHILOSOPHY

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Phil. 20-110	Introduction-Ethics	3	3
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA III	Communications	Foreign Language*	3	
GE AREA III	Communications	Electives*	3	3
GE AREA IV	Humanities		3	6
GE AREA V	T/RS 21	Theology I	3	
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Phil. 28-Elec.	Logic-Thematic Elective	3	3
MAJOR	Phil. Elec.	History of Philosophy Elective		3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA II	Social/Behavior	Electives	6	6
GE AREA V	T/RS 22	Theology II	3	
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Philosophy	Thematic and Free Electives	3	3
MAJOR	Philosophy	History of Philosophy Elective		3
COGNATE	Electives	Electives	6	6
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. T/RS	Philosophy/Religious Studies Elective	3	
GE FREE	Elective	Elective		3
			15	18
		SENIOR		
MAJOR	Philosophy	Elective-Major Seminar	3	3
COGNATE	Electives	Electives	6	6
GE AREA IV	Humanities	Elective		3
GE FREE	Electives	Electives	6	3
			15	15
			TOTAL: 127 credits	

* Foreign language is recommended by Department. Three credits may be placed in Area III (Communications) and three credits in Area IV (Humanities). ENGL 7 (Composition) and Comm. 2 (Fundamentals of Speech) are also recommended by the department for Area III.

In the Cognate area of 24 hours, the department requires that 12 credits be focused in one field. It should be noted that six credits not required by the department in the Major area are added to the Free Area in senior year. These may be taken in any field including philosophy.

MINOR. A minor in philosophy consists of 18 credits, i.e. the 6 credits required of all students and 12 additional credits to be chosen by the student.

PHIL. 111 Drs. Capestany, Black
Aesthetics 3 credits
The main theories of the essential character of beauty or art, how they are judged, how they are related to the mind and the whole person, how they are created and how this creativity expresses a commitment to oneself and to the world.

PHIL. 112 Dr. Whittaker
Logical and Rhetorical Analysis 3 credits
A study of the principles of logic and persuasion, an analysis of fallacies, the principles of structure in written and oral composition. Practice in briefs and abstracts with an emphasis on exactness and clearness. (GE Area III)

PHIL. 113 Dr. Klonoski
Ancient Philosophy 3 credits
The Pre-Socratics, Plato, Aristotle and their immediate successors. Special emphasis on the Theory of Knowledge, the Metaphysics and philosophical Anthropology of Plato and Aristotle.

PHIL. 114 Dr. Garrett
Medieval Philosophy 3 credits
The origin and character of medieval philosophy, early Christian Philosophy, the controversy of the universals, outstanding thinkers of the early scholastic period and the influence of Islamic and Jewish philosophy. (Prerequisite: Ancient philosophy or metaphysics or professor's permission.)

PHIL. 115 Drs. Capestany, Garrett
Philosophy of Aquinas 3 credits
Significance of Aquinas' incorporation of Aristotelianism into the Christian West in the 13th century. Importance of his synthesis of philosophy and theology. Examination of his metaphysics, anthropology and ethics. His relevance to the world.

PHIL. 117 Fr. Mohr
Existentialism 3 credits
A critical study of key concepts in existential philosophy through selective works of Kierkegaard, Sartre, Marcel, and Jaspers. Emphasis is placed on the concepts of self and knowledge.

PHIL. 118 Dr. Klonoski
Phenomemology 3 credits
An introduction to phenomenology, which is a critical methodological approach to human experience. This 20th century European movement will be examined through selected works of Husserl, Heidegger, Sartre, and Merleau-Ponty. The intent of the course is to explore phenomenology both as a theoretical approach to the study of human consciousness and the lived-world and as a unique philosophical method.

PHIL. 121 Dr. Nordberg
Modern Philosophy I 3 credits
The Renaissance Background: Petrach and the humanist movement; Galileo and the beginnings of modern science. Descartes: mathesis universalis; the difficulties of the Cartesian method; solution in the one substance of Spinoza. British Empiricism: Locke and the problem of substance, Berkeley's 'Esse est percipi', culmination in Hume and the doctrine of perceptual atomism.

PHIL. 122 Fr. Mohr
Modern Philosophy II 3 credits
Leibniz: Cartesian and Spinozistic heritage, the problem of universal science; the Monodology Kant: influences of Leibniz, Hume and Newton; the "Copernican revolution" and "Transcendental Criticism". Fichte's transcendental idealsim and Schelling's absolute idealism. Hegel and Phenomenology of Mind; reality as dialectical. Survey of later trends: Schopenhauer, Nietzsche, Bergson.

PHIL. 123 Dr. Fairbanks
Foundations of 20th Century Philosophy 3 credits
A study of some of the key figures that have set the tone for the 20th Century philosophy. Buber, Marx, Kierkegaard, Hume, and Russell are studied in detail.

PHIL. 125 Fr. Mohr
Language and the Existence of God 3 credits
A study of methods of expressing God's existence in language, this course will examine the proofs for existence of God in Anselm, Thomas Aquinas, and Descartes, analyze Kant's critism and Hegel's reevaluation of such proofs, and reflect on modern theories of language about God.

PHIL. 126 Dr. Capestany
Idea of a University 3 credits
An investigation of the philosophy of a liberal education, using John Henry Newman's *Idea of a University* as a tool.

PHIL. 131 Dr. Baillie
Political Philosophy 3 credits
Philosophical and ethical analysis of the social nature of man with emphasis on modern social questions. Ethics of the family, of nation and of communities. International ethics.

PHIL. 132 Drs. Baillie, Carlson, Garrett, Roth; Fr. McKinney
Medical Ethics 3 credits
(Prerequisite: Philosphy 110) The ethical aspects of abortion, euthanasia and preservation of life, sterilization and contraception, artifical insemination, experimentation on human beings, hypnosis, electro-shock therapy and psycho-surgery. Recommended for premedical and nursing students.

PHIL. 133 Drs. Klonoski, Black
Business Ethics 3 credits
(Prerequisite: Philosophy 110) The personal and social ethics of the major areas of decision making in business principles and case work will receive equal stress. Recommended for business majors.

PHIL. 135 Dr. Nordberg
Computers and Ethics 3 credits
The computer revolution raises new ethical problems and presents novel aspects of traditional ethical issues. Ethical aspects of hacking, software piracy, computer aided decision making, protection of software by copyright, patent, trade secret laws, unauthorized use of computer resources, privacy and data-base security, program warranties and programmer responsibility, artificial intelligence, the interface between human and computer. Prerequisite: Phil. 110.

PHIL. 137 Dr. Carlson
Philosophy of Religion 3 credits
An investigation of the main topics which have emerged in philosophers' reflections on religion: arguments for the existence of God; the possibility of statements about God; assessment of religious experience; the notions of miracle, revelation, immortality and afterlife; the problem of evil; relations between religious faith and reason; religion and ethics. Selected readings from classical and contemporary authors.

PHIL. 139 Dr. Black
Philosophy of Sexuality 3 credits
Quite apart from its relation to love, human sexuality is most interesting in its own right. This course begins by asking: What is at stake in the sexual act itself? Is there a significant difference between human sex and the sexual practices of other animals? Can sexual intercourse be a form of "communication"? How are mind and body related in the sex act? What does it mean to "prostitute" oneself? When does sex become pornographic? The balance of the course treats the connotative relationship love and sex: Why do I fall in love? Is sex without love immoral? Is love without sex immoral? What obligations does one have toward one's sex partner? The accompanying problems of "jealousy" and "fidelity" also are addressed.

PHIL 154 Dr. Capestany
Philosophy of History
This course considers three fundamental aspects. First, the ultimate causes of the historical facts (philosophy of history); second, the ultimate causes of the knowledge of those facts (philosophy of the science of history); and finally, a study of the unification of these two in man, reality, and theology.

PHIL. 155 Dr. Fairbanks
Philosophy of Science 3 credits
An introduction to the history and philosophy of science. Selections from Darwin's *The Origins of Species* (1859) and *The Descent of Man* (1871) and Popper, Feyerabend, Hanson, Stace, Quine, Frank, Rescher, Hempel and Baier.

PHIL. 156 Dr. McGinley
Freud and Philosophy 3 credits
Examination of overt and covert philosophical implications of Freud's system of psychoanalysis. Emphasis on actual writings of Freud, particularly after 1920.

PHIL. 158 Fr. McKinney
Philosophy of Interpretation 3 credits
An introduction to the basic thinkers and issues in contemporary hermeneutic philosophy. An exploration of the nature of "interpretation" in the fields of the natural and social sciences, law, literature, history, theology and philosophy. Central thinkers will be Kuhn, Gadamer, Habermas, Ricoeur, and Derrida.

PHIL. 159 Dr. Nordberg
Great Books 3 credits
Major thinkers in the Western philsophical, religious, political and literary traditions. This semester covers Renaissance, Enlightenment and contemporary thought.

PHIL. 160 Dr. Fairbanks
New Directions in Philosophy
The purpose of this course is to use very recent works that develop major philosophical concepts to explain current and possible future roles in human behavior. A course of this type must be constantly updated. However, some of the following books will be used: *The Third Wave, Megatrends, The Fifth Generation, The Hidden Injuries of Class, The Tao Jones Averages, The Aquarian Conspiracy, The Tao of Physics* and *In Search of Excellence.*

PHIL. 162 Dr. McGinley
Seminar in the Philosophy of Jacques Derrida 3 credits
A careful study of some of the writings produced by the French philosopher, Jacques Derrida. The course will be conducted in seminar fashion and will include student presentations of specified texts. Of interest to students in any major concerned with pursuing the "hermeneutical" questions in a theoretical manner.

PHIL. 179 Dr. T. Casey
Philosophy of Technology 3 credits
This course will examine technology as a philosophical issue and shed light on the nature of technology especially over the last 100 years. Based on technology's relation to Western culture since the Middle Ages, the course will analyze the social, political, metaphysical, and ethical significance of modern technics.

PHIL. 190 Staff
Major Seminar 3 credits
For Seniors only, recommended for all majors. A concentrated investigation of an author or thematic problem.

PHYSICAL EDUCATION

DR. WODDER, *Chairperson*

The Physical Education Department aims to improve the physical fitness level of each student and improve and increase students' recreational skills. Emphasis is placed on instruction in a wide variety of popular sports, recreational and competitive athletics, especially those with carry-over value for post college years.

Physical Education is required two periods per week through the freshman and sophomore year. One credit hour is granted in Physical Education each semester.

Every regularly enrolled freshman and sophomore student except veterans must satisfy the Physical Education requirement unless excused by the Physical Education Department.

It is possible to be excused from the Physical Education classes by application to the Physical Education Department if (a) a physician certifies that a student, for medical reasons, should not engage in vigorous physical activity; (b) a student is a member of an intercollegiate varsity team; (c) the department deems it advisable; (d) veterans.

Grading: S—Satisfactory
U—Unsatisfactory, requiring repetition of course
These grades will not be computed in the Quality Point Index.

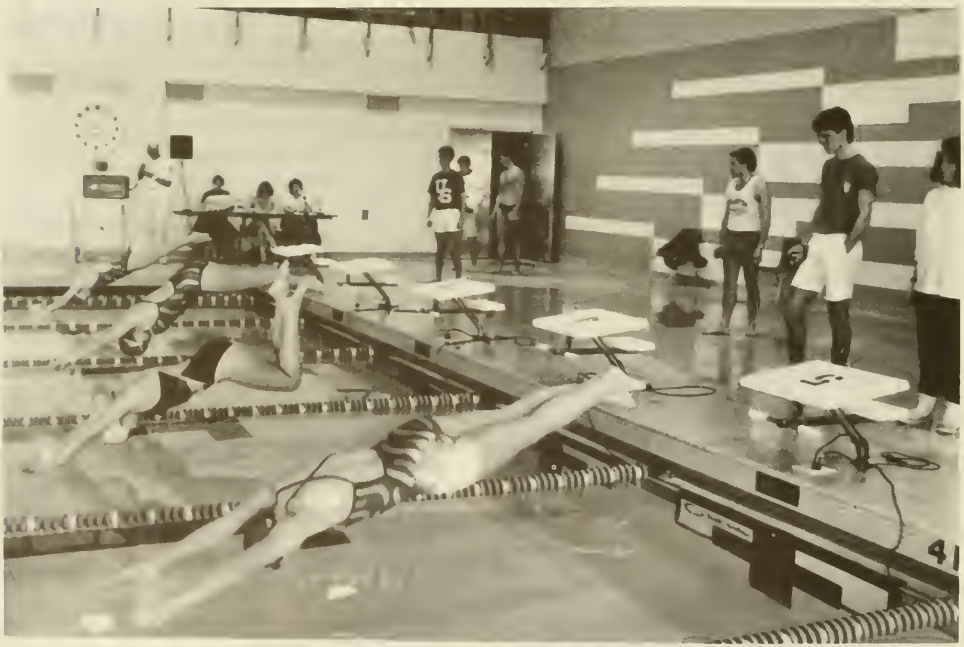
Physical Education 1 credit

Students taking physical education may elect from the following: tennis, swimming, yoga, skiing, soccer, racquetball, weight training, aerobics, basketball, volleyball, bowling, running, karate, self-defense for women, judo, advanced life saving, WSI, ballet, modern jazz dance, care and prevention of athletic injuries, and health education (taught by the Nursing department.) Four credits are needed for graduation.

PHYS. ED. 108 Prof. Bessoir

High School Coaching 3 credits

Especially useful for those who wish to teach and coach high school, this course is concerned with coaching psychology, organization, training and tapping, and fundamentals of sports among other topics. (Applicable only to FREE AREA of General Education Program.)



Byron Complex Swimming Pool

PHYSICS

DR. CONNOLLY, *Chairperson*

The department of Physics/EE offers majors in physics and biophysics, as well as the electronics engineering and electronics-business majors described earlier. The objectives of the department are to provide skills, understanding, and the methodology required to initiate active participation in the development of new knowledge about the material universe. The approach of the physical scientist and engineer, based as it is on the analysis of mathematical models dealing with matter and energy and their interactions, supplies a unique and important insight to the solution of problems in many disciplines.

A 1982 study by the office of institutional research at Franklin and Marshall College shows that over the last 60 years, the University of Scranton ranked 24th out of 867 four-year, private, primarily undergraduate institutions as the baccalaureate origin of physics doctorates. In addition, the biophysics concentration in recent years has regularly produced students admitted to medical school.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Physics 11-12	Elements of Physics I-II	4	4
COGNATE	Math 13-14 or	Pre-Calculus Math.-Analysis or		
	Math 14-21	Analysis I-II	4	4
GE AREA III	Communications	Electives*	3	3
GE AREA II	Social/Behavior	Elective		3
GE AREA V	Phil. 20 or T/RS 21	Introduction to Philosophy or Theol. I	3	
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			15	15
		SOPHOMORE		
MAJOR	Physics 21-22	Elements Modern Physics-Statistics	4	3
COGNATE	Math. 21-22 or	Analysis II-III or		
	Math 22-101	Analysis III-Differential Equations	4	4
GE AREA II	Social/Behavior	Electives	3	3
GE AREA III	Communications	Elective*	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS 21 or Phil. 20	Theol. I or Intro. to Phil.		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			18	17
		JUNIOR		
MAJOR	Phys. 104-105	Electricity and Magnetism I-II	4	4
MAJOR	Phys. 123-110	Mechanics—Atomic/LASER Physics	3	3
COGNATE	Math. 101 or	Differential Equations or Elective	4/3	
	Math/Phys. Elec.			
	Phys. 118	Mathematical Physics I		4
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
GE AREA V	T/RS 22	Theology II		3
			17/16	17
		SENIOR		
MAJOR	Phys./EE	Electives	3	3
MAJOR	Phys. 121	Physics Research	1	1
GE AREA II	Social/Behavior	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil.-T/RS	Philosophy and/or Religious Studies	3	3
GE FREE	Electives	Electives	3	3
			16	13

TOTAL: 128/127 credits

*The Department recommends Comm. 2, Engl. 7, and, in fall semester of sophomore year, CMPS 24 for GE AREA III.

BIOPHYSICS

The biophysics major is designed to prepare a student to apply the physical and mathematical sciences to problems arising in the life sciences and medicine. By choosing proper electives, the student can prepare to enter graduate study of biophysics, biology, biochemistry, medicine or dentistry.

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FRESHMAN		
MAJOR	Biol. 1-2	General Biology 1-2	4½	4½
MAJOR	Physics 11-12	Elements of Physics I and II	4	4
COGNATE	Math. 13-14 or Math. 14-21	Pre-Calculus Math-Analysis I or Analysis I-II	4	4
GE AREA III	Communications	Electives*	6	3
PHYS EDUC	Ph. Ed.	Physical Education		1
			18½	16½
		SOPHOMORE		
MAJOR	Phys. 21-22	Modern-Statistical Physics	4	3
MAJOR	Chem. 11-12	General & Analytical Chem.	4½	4½
COGNATE	Math 21-22 or Math 22-101	Analysis II-III or Analysis III-Diff. Equations	4	4
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Introduction to Theology		3
GE AREA IV	Humanities	Elective		3
PHYS EDUC	Ph. Ed.	Physical Education	2	1
			17½	18½
		JUNIOR		
MAJOR	Phys., Bio., Chem.	Elective	3	
MAJOR	Phys., Bio., Chem.	Elective		3
COGNATE	Chem. 101-102	Organic Chemistry I-II	4½	4½
GE AREA II	Social/Behavior	Electives	3	3
GE AREA IV	Humanities	Electives	6	3
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS	Theology/Religious Studies Elective		3
GE FREE	Elective	Elective	3	
			19½	19½
		SENIOR		
MAJOR	EE. 112 or EE 24	Electronic Instr. Design or Circuit Analysis I		4
MAJOR	Phys., Bio., & Chem.	Electives	6	6
GE AREA II	Social/Behavior	Electives	3	3
GE AREA IV	Humanities	Elective	6	
GE AREA V	Phil.-T/RS	Philosophy and/or Religious Studies	3	3
			18	16
			TOTAL: 144 credits	

*Department recommends Engl. 7, Comm. 2, and CMPS 24, for GE AREA III electives.

PHYS. 2 Dr. Doiron
Modern Astronomy 3 credits
An introductory course for non-science students. A review of the basics about the sun and planets based on the most recent Voyager and Pioneer probes. The observational basis for Astronomy. Basic ideas about the birth and death of stars, blackholes, neutron starts, white dwarf star, star clusters and galaxies. Theory of the origin of the solar system and the universe.

PHYS. 4 Prof. Birmelin, Dr. Connolly
Earth Science 3 credits
Introductory level course for non-science majors. Selected topics from geology and meteorology; weather forecasting, ground and surface water, mountain building, volcanoes, earthquakes, plate tectonics and oceanography. Three hours lecture. No prerequisite.

PHYS. 5 Prof. Birmelin
Seeing the Light 3 credits
A one-semester course in the physics of light and vision. Includes topics such as—physics of the human eye, the physics of telescopes, microscopes and cameras.

PHYS. 6 Prof. Kalafut
Energy and the Environment 3 credits
A course for non-science majors that emphasizes the various aspects of man's use of energy and changes in the environment that accompany that use. Sources of energy; the nature of the present energy and environmental crises and possible solutions; energy requirements of the future; conservation and alternate energy sources.

PHYS. 9-10 Staff
General Physics 8 credits
(Prerequisites: Mathematics 13-14) General college course for pre-medical, pre-dental and biology majors. Mechanics, heat, electricity and magnetism, sound, light and modern physics. Three hours lecture and recitation and two hours laboratory.

PHYS. 11-12 Staff
Elements of Physics 8 credits
(Corequisite: Mathematics 14-21) Calculus based introduction to the elements of Physics. Topics covered: mechanics, heat, sound, light and electricity and magnetism. Required of Physics, E.E., Mathematics, Computer Science and Chemistry majors. Three hours lecture and recitation and two hours laboratory.

PHYS. 21 Prof. Kalafut
Elements of Modern Physics 4 credits
(Prerequisites: Physics 12 and Math 14) Introductory Modern Physics course for physics and engineering majors; also recommended for other science majors. Review of classical physics; Special Theory of Relativity; atomic theory of hydrogen from Bohr to Schroedinger; multielectron atoms and the periodic table; introduction to nuclear physics. Three hours lecture and two hours laboratory.

PHYS. 22 Staff
Statistical Physics 3 credits
(Prerequisites: Physics 21, Mathematics 21) An intermediate course designed to show how the basic notions of atomic theory lead to a coherent conceptual framework capable of describing and predicting the properties of macroscopic systems consisting of many atoms or molecules. It provides an introduction to the subjects of Statistical Mechanics, Kinetic Theory, Thermodynamics, and Heat. Recommended for physics majors. Three hours lecture.

PHYS. 25-26 Dr. McGinnis
Role of Electronics in Communication 6 credits
Introduction to the fundamentals of Electronics Conversion of audio and visual information to electrical signals. Transmission and reception to A-M and F-M signals in radio and TV. Fundamentals of Color as applied to TV. Selected topics in digital communications. This course is designed for the Communicatons Major and assumes no previous training in Physics or Electronics (GE Area I).

PHYS. 103 Prof. Kalafat
Optical Electronics 3 credits
(Prerequisites: Physics 21, Math 101 or Phys. 118) An introduction to the principles of geometrical and physical optics and their application to electronic devices. Topics to be covered include ray and wave optics in linear and non-linear media, waveguides and fiber optics, and the generation and detection of optical radiation. Three hours lecture.

PHYS. 104 Dr. Doiron
Electricity and Magnetism I 3 credits
(Prerequisite: Physics 21; Math 101 may be taken concurrently) Analytical treatment of electrical and magnetic theory; electrostatic fields; dielectric materials; magnetism.

PHYS. 105 Dr. Doiron
Electricity and Magnetism II 3 credits
(Prerequisite: Physics 104) Electromagnetic induction, magnetic materials, electromagnetic fields and waves, applications.

PHYS. 110 Staff
Atomic and LASER Physics 3 credits
(Prerequisites: Physics 21 & Math 101) Intensive and quantitative treatment of modern atomic physics using the principles and techniques of quantum mechanics. The study of energy levels, pumping, feedback and transition rates in lasers. Required of physics majors and highly recommended elective for Electronics Engineers. Three hours lecture with optional laboratory.

PHYS. 118 Dr. Fahey
Mathematical Physics I 4 credits
(Prerequisite: Math 22) Finite Differences and Numerical Techniques. Fourier Series. Laplace Transformations. Introduction to Partial Differential Equations and Boundary Value Problems. Special Functions of Physics, including Bessel Functions, Legendre Polynimials, etc.

PHYS. 121 Dr. Spalletta
Undergraduate Physics and Staff
Research variable credit
Recommended for senior physics students who pursue a specific physical research project to gain experience with research literature, techniques and equipment. Projects are recommended by members of the department and approved by the Chairperson. Written report required.

PHYS. 123 Staff
Advanced Mechanics 3 credits
(Prerequisite: Math 101) Comprehensive course in Newtonian dynamics, Variational principles, Lagrange's and Hamilton's equations; theory of small oscillations and specialized non-linear differential equations in mechanical systems.

PHYS. 153 Staff
Mathematical Physics II 3 credits
Functions of a Complex Variable. Infinite Series in the Complex Plane. Theory of Residues. Conformal Mapping. Fourier and Laplace Transforms. Advanced Partial Differential Equations. Boundary Value Problems in Physics. Green's Functions.

PHYS. 155 Dr. Fahey
Acoustics 3 credits
(Prerequisite: PHYS. 118) This course covers the fundamentals of vibration as applied to one, two and three dimensional systems with varied boundary conditions. Transmission, absorption, attenuation, and radiation are covered. Resonators and waveguides and filters are studied along with the fundamentals of transducers. Acoustical issues in hearing are covered, time permitting.

POLITICAL SCIENCE

DR. DeMICHELE, *Chairperson*

The Bachelor of Science degree program in political science aims to accomplish the following objectives: 1. to give the student a thorough understanding of the nature and purposes of civil society; 2. to impart a sound knowledge of the philosophical basis of democracy; 3. to enable the student to appreciate the problems of his or her own government at work; and 4. to relate the American system to the governments of other states in the international community.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Pol. Sci. 11-12	Intro. to Political Science I-II	3	3
COGNATE	Hist. 1-2	United States History	3	3
COGNATE	Hist. 3-4	Europe: 1500 to Present	3	3
GE AREA III	Communications	Electives*	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Pol. Sci. 101-102	American National Government	3	3
COGNATE	Math. 1-2	Math. Discovery I-II	3	3
GE AREA III	Communications	Electives*	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS 22	Theology II	3	
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Pol. Sci. 114	Western Political Thought		3
MAJOR	Pol. Sci.	Electives**	3	6
COGNATE	Soc. Sci.	Social Science Elective	3	
COGNATE	Pol. Sci. 133	Political Science Statistics	3	
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA V	Phil.-T/RS	Philosophy or Theology/Religious Studies		3
GE FREE	Electives	Electives	3	3
			15	18
		SENIOR		
MAJOR	Pol. Sci.	Electives	6	6
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA IV	Humanities	Electives	6	6
GE AREA V	Phil.-T/RS	Philosophy or Theology/Religious Studies		3
			15	15

TOTAL: 127 credits

* As Communications electives in GE AREA III, the department recommends Comm. 2, English 7 and Comm. 103. For GE AREA IV Humanities electives, the department recommends Hist. 122-23, 142-43. In the GE FREE AREA, the department recommends a modern foreign language in junior year with subsequent language courses to follow in senior year as part of GE AREA IV (humanities). The departmental advisor should be consulted.

** Pol. Sci. 136 (Statistics II) is recommended as elective in spring semester of junior year, particularly for students planning on graduate school or law school.

PUBLIC ADMINISTRATION-PUBLIC AFFAIRS

Intended to improve society by providing professional training for men and women who seek careers as agency administrators, program directors, staff analysts in local, state or federal government or other public service organization, the public affairs/public administration major is also specially suited for those who wish to pursue graduate studies in law, political science, business, planning or development.

Analytical and quantitative skills are developed in combination with a firm background in the social and behavioral sciences in order to provide: 1. substantive knowledge of a range of societal problems, the unique political environment in which the problems exist, and management systems for achieving implementation of policy decisions; 2. management skills in the areas of motivation of leadership, organizational management, personnel management and program evaluation; 3. sensitivity to values of public interests, equal rights, economic, social, cultural and religious institutions.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Pol. Sci. 5-6	Intro. to Pub. Admin./Pub. Pol.	3	3
GE AREA I	Math. 1-2	Math Discovery	3	3
GE AREA III	Communications	Electives*	3	3
GE AREA IV	Humanities	Electives***	3	3
GE AREA V	Phil. 20	Introduction to Philosophy		3
GE AREA V	T/RS 21	Theology I	3	
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
COGNATE	Pol. Sci. 101-102	American National Government	3	3
COGNATE	Pol. Sci. 133-136	PS Statistics I & II	3	3
COGNATE	Econ. 11-12	Principles of Economics	3	3
GE AREA III	Communications	Elective	3	
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS 22; Phil-T/RS	Theol. II; Electives	3	3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Pol. Sci. 131-108	Public Law-Legislative Process	3	3
MAJOR	Pol. Sci. 105-106	State Government-Local Government	3	3
MAJOR	Pol. Sci. 183	Public Personnel and Organization	3	
COGNATE	Acc. 3-4	Financial & Managerial Accounting	3	3
COGNATE	Soc. 21	Principles of Sociology		3
GE FREE	Electives	Electives	3	3
			15	15
		SENIOR		
MAJOR	Pol. Sci. 112	Politics of the Budgetary Process	3	
MAJOR	Pol. Sci. 186	Public Policy Analysis		3
MAJOR	Pol. Sci. 195	Practicum/Internship		3
MAJOR	Pol. Sci. Electives	Electives**	3	3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA IV	Humanities	Electives***	6	6
GE AREA V	Phil.-T/RS	Elective	3	
			18	15
			TOTAL:	127 credits

* Department recommends Comm. 2 & English 7 for AREA III Electives
** Major electives to be selected in consultation with advisor
*** Department recommends History 1-2 & History 3-4 for AREA IV Electives

INTERNATIONAL STUDIES

A major in International Studies seeks to provide the student with a full recognition and understanding of the multitudinous forces which shape the contemporary world—nationalism, wars, political and economic ideologies, cultural differentials, and modern technology. Such a broad knowledge and understanding of world affairs can be utilized in careers in teaching, international business, the legal profession, journalism, the Foreign Service of the United States, and other government agencies.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	History 1-2	United States History	3	3
COGNATE	Pol. Sci. 101-102	American National Government	3	3
COGNATE	Language 1-2 or 23-24	Elementary or Intermediate	3	3
GE AREA III	Communications	Communications Electives**	3	3
GE AREA V	Phil. 20	Introduction to Philosophy		3
GE AREA V	T/RS 21	Theology I	3	
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	History 3-4	Europe: 1500 to Present	3	3
MAJOR	Pol. Sci. 111-130	Internatl. Rel.-Ecopolitics	3	3
MAJOR	Geog. 112	Introduction to Geography	3	
GE AREA II	Economics 11-12	Modern Economics Society	3	3
GE AREA III	Language	Intermediate or Advanced	3	3
GE AREA V	Phil. 110	Ethics		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	History of Pol. Sci.	Electives*	6	6
COGNATE	Electives	Electives†	3	3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA V	T/RS 22; Phil-T/RS	Theol. 11; Electives**	3	3
GE FREE	Elective	Elective		3
			15	18
		SENIOR		
MAJOR	H/PS 180	Seminar		3
COGNATE	Electives	Electives†	3	3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA II	Social/Behavior	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS	T/RS Eelctive**	3	
GE FREE	Elective	Elective		3
			15	15
			TOTAL: 127 credits	

* Major electives to be selected from P.S. 115, P.S. 116, H/P.S. 120, H/P.S. 121, P.S. 140, P.S. 134, H/P.S. 148, Hist. 151, H/P.S. 152, Hist. 161, P.S. 175, H/P.S. 176, H/P.S. 179, H/P.S. 180, Hist. 182, Hist. 183, H/P.S. 128, H/P.S. 129, P.S. 145, P.S. 146, H/P.S. 181, P.S. 135.

** Department recommends Engl. 7 and Comm. 2 as Area III electives and T/RS 178 and 179 as AREA V electives.

† Department recommends cognate electives be used if needed to complete a language sequence up to the advanced level, otherwise, it is recommended that they be used for appropriate course sequences in the School of Management such as Mgt. 108-Mgt. 168, Mkt. 107-Mkt. 167, or additional course work in economics/finance, for which AREA II electives can also be applied.

MINORS

A minor in **Political Science** (18 credits) should include Pol. Sci. 11, 12, 101 and 102, plus any two additional political science courses.

A minor in **Public Administration** (18 credits) should include P.S. 5, 6, 101 and 102 plus any two additional courses from the following P.S. 105, P.S. 106, P.S. 108, P.S. 112, P.S. 131, 133, P.S. 183 and P.S. 186.

A minor in **International Studies** (18 credits) should include History 1 and 2, Pol. Sci. 101 and 102 plus two additional courses from the following: P.S. 111, P.S. 116, H/P.S. 120, H/P.S. 121, P.S. 130, P.S. 134, P.S. 140, H/P.S. 148, Hist. 151, H/P.S. 152, Hist. 161, Hist. 162, P.S. 175, H/P.S. 176, H/P.S. 179, H/P.S. 182, H/P.S. 183, H/P.S. 128, H/P.S. 129, P.S. 145, P.S. 146, H/P.S. 181 and P.S. 135.

POL. SCI. 5 Dr. Harris
Introduction to Public Administration 3 credits
Introduction to the study of public bureaucracy. The growth of the administrative state, the role of bureaucracy in our democratic government, and the day-to-day operation of government bureaucracy are considered.

POL. SCI. 6 Dr. Champney
Introduction to Public Policy 3 credits
An analysis of public policy in the U.S., with an emphasis on the technical and political problems of policy formulation and implementation. Discussion of the impact of legislative, executive and judicial institutions and processes on the content of public policy.

POL. SCI. 11 Staff
Introduction to Political Science I 3 credits
An introduction to the major concepts, goals and philosophical foundations of political inquiry, including description of the scope of contemporary political science and its sub-fields.

POL. SCI. 12 Staff
Introduction to Political Science II 3 credits
Inquiry into political institutions and processes of industrial democracies; Communist state systems; and developing nations.

POL. SCI. 101-102 Staff
American National Government 6 credits
An analysis of society, state, authority, and common good. Forms of government. The constitution, federalism, structure, operations and functions of the three branches.

H/PS 103 Dr. Feller
Saving America's Past 3 credits
(See description under History)

POL. SCI. 105 Staff
State Government 3 credits
The natural constitutional position of the states and the changing federal-state relationships. State governments in actual operation. Emphasis on Pennsylvania and actual problems of procedure and policy.

POL. SCI. 106 Staff
Local Government 3 credits
Types and evolution of local government; constitutional and statutory limitations; functions of divisions; structure and operation.

POL. SCI. 108 Dr. Dougherty
American Legislatures 3 credits
An investigation into the legislative process at both federal and state levels. Special attention is given to the structure for decision-making: partisan and interest-group influences; executive and judicial interactions.

POL. SCI. 110 Dr. Dougherty
Introduction to American Law 3 credits
An inquiry into the major theories of jurisprudence; development of American legal theory and practive; structure, functioning, and contemporary problems of the federal and state court systems.

POL. SCI. 111 Staff
International Relations 3 credits
A survey of workings in the nation-state system; power politics; equilibrium mechanisms; organizational functionalism; Third World.

POL. SCI. 112 Dr. Harris
Politics of the Budgetary Process 3 credits
Public budgeting in theory and in practice is discussed. Historical reforms and the inevitable politics of the process are considered. Use of a budget simulation allows for practical experience.

POL. SCI. 114 Staff
Western Political Thought 3 credits
The roles of the state and society, the auxiliary agencies and functions of government as viewed by political philosophers from Plato to Marx.

POL. SCI. 115 Dr. Dougherty
Modern Political Thought 3 credits
A study of theoretical foundations of the three major political idea-systems identified with the twentieth century: communism, fascism and democracy.

H/P.S. 120-121 Dr. Hueston
American Diplomatic History 6 credits
(See description under History.)

H/P.S. 122-123 Staff
American Constitutional and Legal History 6 credits
(See description under History.)

POL. SCI. 127 Staff
Special Topics in Political Science 3 credits
Study and analysis of selected topics in the field of Political Science. The particular topic or topics will vary from year to year depending on the instructor and changing student needs.

H/PS 128 Dr. DeMichele
Britian: Past and Present 3 credits
(See description under History.)

H/P.S. 129 Dr. Parente
Politics of Islam 3 credits
The political ideology of Islam; the political content of the Koran; the effort to establish theocracies in a number of states from Iran to Egypt to Malaysia and Indonesia; Islam as a political opposition in such countries as the Phillipines, USSR, and China; Shiite versus Sunni sects; the politics of Israel and the Islamic states of the Middle East; OPEC; the Palestinian question; political terrorism; Islam as an expansionist ideology.

POL. SCI. 130 Dr. Dougherty
Ecopolitics 3 credits
The economic, ecological, energy, environmenal, and ethical issues of the shift emerging in international relations.

POL. SCI. 131 Dr. Dougherty
Administrative Law 3 credits
Administrative decision-making by quasi-legislative and/or quasi-judicial agencies, legally protected rights of persons and corporate entities; appellate review of administrative determinations; use of case method.

POL. SCI. 133 Dr. Champney
Political Science Statistics I 3 credits
Discussion of the principles, concepts and rationale which underlie the "scientific" approach to the study of political phenomena. Introduction to the quantitative and statistical research strategies which this approach has generated, including simple contingency table analysis, the chi squared statistic and the gamma statistic.

POL. SCI. 134 Dr. Dougherty
Comparative Government 3 credits
A representative sampling of foreign political forms and processes (including non-Western), as contrasted with those in the United States.

POL. SCI. 135 Dr. Parente
Comparative Communist Systems 3 credits
A study of the different Communist systems throughout the world and how they relate to each other as well as to other types of government in the world.

POL. SCI. 136 Dr. Champney
Political Science Statistics II 3 credits
(Prerequisite: P.S. 133) A detailed analysis of the quantitative and statistical research strategies which the "scientific" approach to the study of political phenomenon has generated, including simple correlation, partial correlation and multiple regression techniques.

POL. SCI. 138 Dr. Dougherty
Leaders and Elites 3 credits
Information and analysis of political elites and their leadership behavior, drawn from pluralist, transistional, and structured societies.

POL. SCI. 140 Prof. Williams
Geopolitics 3 credits
A study of geographic factors in World History. Geographic factors in national power and international relations: an analysis of the role of "Geopolitics" with reference to the current world scene.

H/P.S. 142 Dr. DeMichele
English Constitutional and Legal History to 1485 3 credits
Anglo-Saxon basis, fusion of Anglo-Saxon and Norman political institutions; Angevin innovations; Magna Carta; concept of representation; beginnings of the Common Law; jury system; content for government; energence of Parliament; the refinement of government.

H/P.S. 143 Dr. DeMichele
English Constitutional and Legal History, 1485 to Present 3 credits
Tudor absolutism; struggle between royal prerogative and Parliament; rise of the House of Commons; Parliamentary supremacy after 1688; development of Cabinet government; democratic reforms; Parliamentary Bill of 1911; extension of administrative law.

POL. SCI. 145 Dr. Parente
Politics of South East Asia 3 credits
Domestic ethnic and religious politics of Southeast Asia and international politics affecting the region. The six ASEAN nations (Thailand, Indonesia, Malaysia, Phillipines, Singapore, and Brunei) and Burma, the region's only socialist country; the three communist states of Indochina: Vietnam, Laos, and Cam-

bodia. The American, Soviet and Chinese spheres of influence. Capitalism versus state socialism as a lever of economic development.

POL. SCI. 146 Dr. Parente
Politics of the U.S.S.R. 3 credits
The political culture and institutions of the Soviet Union. Historical and geographical influences. Ethnic and religious politics; literary politics; foreign relations with Eastern European states and with China. Soviet-US relations; relations between Soviet communist party and foreign communist parties.

H/P.S. 148 Dr. Homer
War and Modern Society 3 credits
Role of military force in international relations; historical background focusing on wars, American and European, of 19th and 20th centuries; theories of function of war; arms control and deterrence of war.

H/P.S. 152 Dr. Earl
Soviet Foreign Policy 3 credits
Examination of the course of Soviet Foreign Policy from 1917 to present. Analysis of forces, factors and motives that have molded Soviet history and its relations with other nations.

H/P.S. 154 Dr. Harris
Women in the Workforce 3 credits
Historical, political and legal perspectives of women in the workforce and also the difficulties confronted by women in today's work environment.

POL. SCI. 175 Dr. DeMichele
Contemporary World Problems 3 credits
Focus on major problems which continually confront world in modern times. U.S. problems emphasized; war, violence, poverty, ecology.

H/P.S. 176 Dr. DeMichele
World Politics 3 credits
Deals directly with the political, economic, and social issues that are current in international affairs including the future possibilities of world order and the crises of foreign policy-making.

H/P.S. 180 Prof. Williams
Seminar in International Studies 3 credits
Required for International Studies majors. Other advanced undergraduates may take course with permission of the professor.

H/P.S. 181 Dr. Parente
Modern China 3 credits
(See description under History.)

POL. SCI. 181 Dr. Champney
Political Behavior 3 credits
Social and economic factors which shape the relationship between individual citizens and their institutions of government. Emphasis on mass political behavior in the U.S. and the factors which shape electoral participation and interest group involvement.

POL. SCI. 183 Dr. Harris
Public Management and Personnel 3 credits
An examination of organizational structure and personnel administration. Theories of organization, personnel processes, the history of civil service and current issues in personnel management are considered.

POL. SCI. 186 Dr. Champney
Public Policy Analysis 3 credits
Analysis of the functions and methods of the public sector and a discussion of the effect of public sector activities on society and the economy of the United States. Particular emphasis is placed on "public problem vs. private problems" and on the desirable scope of governmental activities in a free society.

H/P.S. 188 Drs. Earl, DeMichele
Ethnic & Racial Minorities in Northeastern Pennsylvania 3 credits
(See description under History.)

POL. SCI. 195 Staff
Political Science Internship 3-6 credits
Designed to broaden the educational experience of students by providing practical experience for them with various public agencies and institutions. Supervision by faculty member and agency supervisor.

GEOG. 112 Dr. Conover
Introduction to Geography 3 credits
A course designed to introduce the major concepts and skills of geography. Major land forms, bodies of water, climate and the relation of land to human endeavor will be covered.

Campus Sculpture: "Jacob Wrestling with the Angel" by Arlene Love.

PSYCHOLOGY

DR. NORCROSS, *Chairperson*

Psychology provides a unique educational experience of quality, breadth, and flexibility. Our curriculum has been carefully designed to give students a balanced basic education in the discipline and the widest range of options, from baccalaureate entry-level positions to graduate training in prestigious universities. According to a recent independent study, the number of our graduates who have gone on to receive Ph.D's in psychology has placed us in the top 6% of comparable institutions nationally.

Psychology majors are required to take Psych. 23, Psych. 24, and Psych. 30 with lab. Students also take at least one course in each of the following groups: Physiological Processes (142, 147), Learning Processes (143, 154), Social-Developmental Processes (144, 148), and Individual Processes (126, 145). Students are free to choose from any of these or the remaining courses to fulfill the 5 additional course requirements in the major. Completion of two 1-credit psychology labs constitutes an elective course. Students are encouraged to take Psych. 160-161, Undergraduate Research, in their junior or senior year.

The Psychology Department encourages students to tailor their programs to their own needs and interests. For example, for those interested in marketing, personnel or industrial-organizational psychology, there is a special Business Minor and certain recommended courses in psychology. Integrated programs and dual majors are also available with a number of other departments.

The Clinical Track in psychology is a structured sequence of courses providing a synthesis of scientific knowledge, interpersonal development, and clinical experience. The track is designed for psychology majors seeking entry level employment or graduate training in clincial, counseling, community, or school psychology. The required courses are: Psych. 145; H/HS 101; Psych. 157; Psych. 141; Psych. 158; one from H/HS 117, CFS 165, GERO. 122; and one from Psy. 170, H/HS 103, and CFS 172. Consult your advisor for details.

MINOR. A minor in psychology consists of Psych. 23, Psych. 24 (or an equivalent statistics course), Psych. 30 Lecture, and one course in each of the following groups: Physiological Processes (142, 147), Learning Processes (143, 154), Social-Developmental Processes (144, 148), and Individual Processes, (126, 145). Total: 21 credits.

PSYCH. 23 Staff
Fundamentals of Psychology 3 credits
An introduction to the scientific study of behavior through a survey of psychology's principal methods, content areas, and applications. Course requirements include participation in psychological research or preparation of a short article review.

PSYCH. 24 (Area I) Drs. Buchanan
Psychological Statistics & Dunstone
3 credits
An introduction to the basic statistics used in the behavioral sciences, including descriptive statistics, correlation, sampling, hypothesis testing, and inferential statistics.

PSYCH. 30 Drs. Baril & Cannon
Research Methods in the Behavioral Sciences 5 credits
(Prerequisites: Psych. 23 & 24) A survey of scientific method and research design in the behavioral sciences. Topics include single subject, survey, correlational and experimental research. Labs involve computerized data analyses, scientific writing, and research supervised by individual faculty. Three credits lecture, two credits laboratory. Lab fee.

PSYCH. 126 Staff
Personality 3 credits
(Prerequisite: Psych. 23) A survey and critical evaluation of personality and its implications for assessment, psychotherapy, and research.

PSYCH. 141 Dr. Norcross
Psychological Testing 3 credits
(Prerequisite: Psych. 24) Provides a thorough grounding in principles of testing and a review of the major types of assessment, including intellectual, personality, and interest.

PSYCH. 142 (Area I) Dr. O'Malley
Sensation and Perception 3-4 credits
(Prerequisite: Psych. 23) Concerns the study of sensory mechanisms and perceptual phenomena. Optional lab entails supervised individual experimentation. Three credits lecture and optional one credit laboratory. Lab fee.

PSYCHOLOGY

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Psych. 23-Elective	Fund. of Psych.-Elective	3	3
COGNATE	Math. 6-7 or one more advanced math course†	Quant. Meth. I-II or more advanced course/cog. elective†	3/4	3
GE AREA III	Communications	Electives*	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20-T/RS 21	Intro. to Phil.-Theol. I	3	3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16/17	16
		SOPHOMORE		
MAJOR	Psych. 24-30	Statistics-Research Methods	3	5
MAJOR	Electives	Elective-Elective	3	3
COGNATE	Science Electives	Elective-Elective**	3	3
GE AREA II	Electives	Elective-Elective*	3	3
GE AREA III	Communications	Elective*	3	
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	15
		JUNIOR		
MAJOR	Electives	Electives-Electives	6	9
COGNATE	Elective	Electives	3	6
GE AREA II	Elective	Elective*	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
			18	18
		SENIOR		
MAJOR	Electives	Elective	3	
COGNATE	Elective	Elective		3
GE AREA II	Elective	Elective*		3
GE AREA IV	Elective	Electives	3	3
GE AREA V	T/RS 22-T/RS-Phil.	Electives	3	6
GE FREE	Electives	Electives	6	3
			15	18

TOTAL: 132/133 credits

* The Department recommends that the student acquire a broad background in Area II by selecting courses from at least two majors in the social/behavioral sciences; for example, Sociology 21 is highly recommended. Regarding Area III, the Department recommends that the student take English 7 and English 9. Unless exempt from the University requirement, students must also take Comm. 2.

** Combinations of Biol. 3 & 4, or Biol. 107 and another science elective are required.

† Students who take Math 13 or above must take a second cognate elective, which may or may not be in math.

PSYCHOBIOLOGY

The foundation courses of this curriculum are selected from the Psychology, Biology, and Chemistry Departments. Depending upon the electives chosen, the major will prepare students for entry into masters or doctoral programs in the field of neuroscience. Graduate training in neuroscience may encompass a variety of disciplines including psychology, biology, anatomy, pharmacology, toxicology, biophysics, and biochemistry. Students have ample research opportunities within the department related to the Psychobiology major. Laboratory facilities can support a diversity of behavioral, biochemical, neurophysiological, and neuroanatomical investigations. Our program is listed in the 1987 edition of *Neuroscience Training Programs,* published by the Society for Neuroscience. Dr. J. Timothy Cannon is the coordinator of the Psychobiology Major.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Psych. 23-Elective	Fund. of Psych.-Elective*	3	3
MAJOR	Biol. 1-2	General Biology I-II	4½	4½
GE AREA III	Communications	Electives**	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20-T/RS 21	Intro. to Phil.-Theol. I	3	3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			17½	17½
		SOPHOMORE		
MAJOR	Psych. 147	Physio. Psych. & Lab	4	
MAJOR	Psych. 24-Psych. 30	Psych. Stat.-Research Methods	3	5
COGNATE	Chem. 11-12	General & Anal. Chemistry	4½	4½
GE AREA II	Electives	Elective-Elective	3	3
GE AREA III	Elective	Elective**	3	
GE AREA V	Phil. 110	Ethics		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			18½	16½
		JUNIOR		
MAJOR	Electives	Elective*-Elective*	3/4	3/4
MAJOR	Electives	Elective*-Elective*	3/4	3/4
COGNATE	Math 13-14 or 14-21	Pre-Calc.-Calc. I or Calc. I-II	4	4
COGNATE	Electives	Elective***-Elective***	3/4½	3/4½
GE AREA IV	Humanities	Elective-Elective	3	3
			16/19½	16/19½
		SENIOR		
MAJOR	Elective	Elective*	3	
COGNATE	Elective	Elective***	3	
GE AREA II	Electives	Electives		6
GE AREA IV	Humanities	Elective-Elective	3	3
GE AREA V	T/RS 22-Phil. T/RS	Theol. II-Electives	3	6
GE FREE	Electives	Electives	3	3
			15	18
			TOTAL:	135-142

* Students must take 6 major elective courses, a minimum of 2 each in Psychology and Biology. The remaining 2 electives may be taken from either department.

** Unless student is exempt from the University requirements, Engl. 7 and Comm. 2 are recommended in freshman year; CMPS. 24 recommended in sophomore year.

*** Students should consider their projected graduate program when choosing cognate electives from the areas of chemistry, physics, and computer science.

CHILD AND FAMILY STUDIES

The Child and Family Studies major, coordinated by Dr. James Buchanan, is an interdisciplinary major with core courses in human development and social service skills. The major is designed to: 1) train students in the area of personal and family development; 2) prepare students for B.S. entry level positions in human and family developmental service roles in such settings are preschools, family service agencies, juvenile detention centers, and institutions for retarded and emotionally disturbed children; 3) prepare student through major and elective courses for graduate education in marriage counseling, child development, and related fields.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Psych. 23-Psych. 144	Funds. of Psych.-Childhood and Adolescence	3	3
COGNATE	Soc. 21	Introduction to Sociology	3	
GE AREA I	Natural Science	Elective		3
GE AREA III	Communications	Electives*	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Soc. 107 or 110	Child Welfare or Marriage/Fam.	3	
MAJOR	Psych. 155	Adulthood & Aging		3
MAJOR	Psych. 145-C&FS 165	Abnormal Psychology—Exceptional Child	3	3
COGNATE	H/HS 101-Elective	Case Management-Elective	3	3
COGNATE	H/HS 102 or Psych. 157	Theories of Counseling or Clinical Psychology		3
GE AREA I	Nat. Sci.	Natural Science Electives**	3	3
GE AREA III	CMPS 21*	Computers for Business & Social Sciences*		3
GE AREA V	Phil. 110	Ethics	3	
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	19
		JUNIOR		
MAJOR	Psych. 24-Elective	Statistics-Psych. Elective	3	3
MAJOR	Elec.††-Soc. 198, Psych. 158 or H/HS 199	Elective††-Practicum/Field Experience	3	3
COGNATE	Gero. 101-Elective	Intro. to Gerontology-Elective	3	3
COGNATE	Elective	Elective		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS 22	Theology II	3	
			15	15
		SENIOR		
MAJOR	Electives††	Electives††	3	3
COGNATE	Elective	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. T/RS	Electives	3	3
GE FREE	Electives	Electives	3	6
			15	15

TOTAL: 127 credits

* Recommended Courses. Comm 2 (Speech) and Engl. 7 (Composition) are recommended as communication electives in freshman year.

** Biol. 3 and 4 or 2 courses from Biol. 10, Biol. 24, Biol. 107, Biol. 64.

† Must be approved by coordinator of Child & Family Studies major. May be shifted to senior year. Psych. 158 has prerequisites of Psych. 145 & 157.

†† Electives must be approved by coordinator of Child & Family Studies major.

PSYCH. 143 (Area I) Dr. Dunstone
Conditioning and Learning 3-4 credits
(Prerequisite: Psych. 23) Concerns the experimental study of both classical and instrumental conditioning. Optional lab involves supervised animal and human experimentation. Three credits lecture and optional one credit laboratory. Lab fee.

PSYCH. 144 Dr. Buchanan
Childhood and Adolescence 3 credits
(Prerequisite: Psych. 23) Survey of psychological research dealing with the development and behavior of children from infancy to adolescence. The physical, cognitive, and social aspects of development across age periods (prenatal, infancy, childhood, and early adolescence).

PSYCH. 145 Dr. Norcross
Abnormal Psychology 3 credits
(Prerequisite: Psych. 23) A comprehensive survey of mental and behavioral disorders from biological, psychological, and sociocultural perspectives. The course will consider diagnosis and labeling, overview of specific disorders, and various treatment approaches.

PSYCH. 146 (Area I) Dr. Dunstone
Advanced Psychological Statistics 3 credits
(Prerequisite: Psych. 24) An introduction to analysis of variance and experimental design. Emphasis is placed on models, interpretations of data, relative advantages and disadvantages of major experimental designs.

PSYCH. 147 (Area I) Dr. Cannon
Physiological Psychology 3-4 credits
(Prerequisite: Psych. 23) Introduction to the field of neuroscience examining the cellular bases of behavior, effects of drugs on normal and abnormal behaviors, brain/body correlates of motivation and emotion, neural changes accompanying pathology (e.g., psychosis, learning disorders, stroke and senility). Three hours lecture and optional one credit laboratory. Lab fee.

PSYCH. 148 Dr. Baril
Social Psychology 3 credits
(Prerequisite: Psych. 23) Social determinants of behavior from a psychological perspective. Topics include affiliation, conformity, persuasion and attitude change, person perception.

PSYCH. 149 Dr. Baril
Industrial/Organizational Psychology 3 credits
(Prerequisite: Psych. 23) The psychological study of people at work. Topics include personnel selection and training, motivation, leadership, the physical work environment, and consumer behavior.

PSYCH. 151 Dr. O'Malley
History and Systems of Psychology 3 credits
(Prerequisite: Psych. 23) Historical origins of various schools of thought and current views in psychology. Philosophical as well as empirical traditions are emphasized.

PSYCH. 154 Dr. Buchanan
Cognitive Psychology 3-4 credits
(Prerequisite: Psych. 23) This course will consider a number of approaches to the study of human cognitive processes with an emphasis on the information processing model. Topics include pattern recognition, attention, memory, imagery, concepts and categories, and problem solving. Three credits lecture with optional one credit laboratory. Lab fee.

PSYCH. 155 Dr. Buchanan
Adulthood and Aging 3 credits
(Prerequisite: Psych. 23) Survey of the psychological research dealing with the age-graded aspects of behavior in adulthood. Course will consider the physical, cognitive, and social aspects of the aging process from late adolescence to death. Topics include occupation selection, marriage, parenthood, middle age, retirement, and dying.

PSYCH. 157 Dr. Norcross
Clinical Psychology 3 credits
(Prerequisite: Psych. 23; recommended: Psych. 145) An overview of contemporary clinical psychology focusing on its practices, contributions, and directions. Topics include clinical research, psychological assessment, psychotherapy systems, community applications, and emerging specialties, such as health and forensic psychology.

PSYCH. 158 Dr. Norcross
Field Experience in Clinical Psychology 3 credits
(Prerequisites: Psych. 145, 157, and permission of instructor) This course entails supervised field experience in a mental health or social service facility in the community. Students are required to spend 8 hours a week at their placement and 1 hour a week in a seminar throughout the semester. Limited to juniors and seniors.

PSYCH. 160-161 Staff
Undergraduate Research 3-6 credits
(Prerequisite: Psych. 30 and permission of professor) Individual study and research on a specific topic under the supervision of a faculty member.

PSYCH. 170 Staff
Special Topics in Psychology 3 credits
(Prerequisite: Psych. 23) Courses developed by individual faculty to provide in-depth coverage of a specific area in psychology. Examples include Psychology of Sport and Behavior Modification. Course titles will be provided in advance of registration. This course can only be used once to satisfy major elective requirements.

C&FS 165 Dr. Duricko
Exceptional Child 3 credits
(Prerequisites: Psych. 23 and 145) This course will consider atypical social, emotional, and mental development during childhood and adolescence. Topics include mental retardation, intellectual giftedness, learning disabilities, psychopathology of childhood and adolescence, and conduct disorders.

C&FS 124 Dr. Buchanan
Parental Process and Family Development 3 credits
(Prerequisite: Psych. 23) This course will explore the bidirectional interaction between child and parent as it relates to the development of all individuals in the family. Topics to be covered include: parenting strategies; the roles of famly members; parenthood and marriage; parenting at specific developmental stages; and families with single parents, exceptional children, and child abuse.

C&FS 172 Dr. Norcross
Marital and Family Therapy 3 credits
(Prerequisite: Psych. 23; recommended: Psych. 145) An introduction to the theory, research, and practice of couples counseling and cojoint family therapy. Topics include family dysfunctions, assessment methods, treatment approaches, innovative techniques, and research findings.

C&FS 197 Staff
Special Topics in Child and Family Studies 3 credits
(Prerequisite: Psych. 23) This course will be offered periodically to cover special topics in human development and family processes.

Psychology Department

SOCIOLOGY

DR. RIELLY, *Chairperson*

Courses in Sociology seek to provide both the terminal student and the prospective graduate student with a basic understanding of the forces that are part of the social processes. In addition, the courses are designed to help the student interested in the field of Social Work, Human Services, etc., to attain a pre-professional orientation to these fields.

Students interested in Urban Planning are advised to include Soc. 106, 111, and 114 in their planning; for Social Work, Soc. 104, 106, 107, 109 and 114; for Medical Services/Administration, Soc. 127, Gero. 103, 105, 107 and 112; for Personnel Relations/Administration, Soc. 115, 148, and 150.

The Department of Sociology/Criminal Justice also administers the Criminal Justice/Law Enforcement major described earlier and the Gerontology major described below.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Soc. 21-22	Principles—Social Problems	3	3
COGNATE	Psych. 23	Fundamentals of Psychology	3	
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA II	Communications	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Soc. 117-118	History of Sociological Thought I-II	3	3
MAJOR	Sociology	Electives	3	3
COGNATE	H/HS 11-Soc. Sci. Elec.	Foundations of Human Services-Elective	3	3
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities	Elective	3	
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS 22	Theology II		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Soc. Elec.	Sociology Electives	3	3
COGNATE	Pol. Sci.	Political Science Science Elective	3	
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. T/RS	Philosophy and/or Religious Studies	3	3
GE FREE	Electives	Electives	3	3
			18	15
		SENIOR		
MAJOR	Soc. 191, 198, 199	Internship Electives/Independent Study	3	3
COGNATE	Soc. Sci. Elec.	Electives	3	3
COGNATE	Hist./Pol. Sci.	History/Political Science Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE FREE	Electives	Electives	3	3
			15	15
			TOTAL: 127 credits	

In GE AREA I, the department recommends Biology 3 and 4. In GE AREA III, the department recommends Comm. 2, Engl. 7, and CMPS. 21. In the COGNATE Social Science Electives, the department recommends a mix of Human Services, Criminal Justice, Gerontology, and Psychology electives, especially Psych. 126:Personality; Pol. Sci. 133: Statistics I; and S/CJ 112: Criminological Research.

GERONTOLOGY

The degree program in Gerontology has the following objectives:

1. to understand the processes of aging; 2. to prepare for careers in agencies and institutions serving the aged, such as Area Agencies on Aging, Family Services, Long Term Care facilities, Telespond, etc; 3. to provide a liberal gerontology education with special emphasis on the development of the whole person; 4. to provide students with academic preparation for advanced study in gerontology, social work, public administration, social welfare, and related fields.

The Scranton area is especially suited to serve as a laboratory setting for gerontology education with its high proportion of elderly citizens and its many agencies and facilities for the aged.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	Soc. 21-Gero. 101	Principles of Soc.-Intro. to Gerontology	3	3
COGNATE	Psych. 23-H/HS 12	Fundamentals of Psych.-Health/HS Interventions	3	3
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Elective	3	
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Gero. 105	Social Policy and Aging	3	
MAJOR	Gero. 126	Aging and Death		3
MAJOR	Gerontology	Electives	3	3
COGNATE	H/HS 101-Psych. 148	Case Management—Social Psychology	3	3
GE AREA III	Communications	Elective	3	
GE AREA IV	Humanities	Elective	3	
GE AREA V	Phil. 110	Ethics		3
GE AREA V	T/RS 22	Theology II		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	Gero. 103-Elec.	Health and Aging—Elective	3	3
COGNATE	Psych. 155	Late Adolescence, Adulthood & Aging	3	
COGNATE	Soc. 114	American Minorities		3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil-T/RS Elec.	Electives	3	3
GE FREE	Elective	Elective	3	
			18	15
		SENIOR		
MAJOR	Gero. 191, 198, 199	Internship/Electives/Indep. Study	3	3
MAJOR	Gerontology	Electives	3	3
COGNATE	Soc. Sci. Elec.	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE FREE	Electives	Electives	3	3
			15	15

TOTAL: 127 credits

The Gerontology Internship may be taken in either the junior or senior years, or both (not to exceed a maximum of six credits of internship).

In GE AREA I, the department recommends Biol. 13 & 14 and NURS. 10: Family Health. In GE AREA III, the department recommends Comm. 2 and Engl. 7. In the COGNATE as Social Science Electives, the department recommends H/HS 102, 103, 115, 116, 122; Sociology 22, 106, 109, 127.

MINORS

SOCIOLOGY. A minor in Sociology will require fifteen credits in sociology. There are two required courses: Soc. 21: Principles of Sociology, and Soc. 118: History of Sociological Thought II. The following elective courses are strongly recommended in the sociology sequence: Soc. 104: Cultural Anthropology, Soc. 111: Urban Sociology, Soc. 114: American Minorities, and Soc. 115: Sociology of Work and Professions.

GERONTOLOGY. A minor in Gerontology will require eighteen credits. There are three required courses: Soc. 21: Principles of Sociology; Gero. 101: Introduction to Gerontology; and Gero. 105: Social Policy and Aging. The following elective courses are strongly recommended by the department in the gerontology sequence: Gero. 103: Health and Aging; Gero. 107: Aging and Community; Gero. 112: Aging & the Life Cycle; Gero. 126: Aging and Death.

SOC. 21 Staff
Principles of Sociology 3 credits
Fundamental principles in the field of sociology. Stratification, ethnicity, deviance. The basic institutions of society; social change and demographic trends.

SOC. 22 Staff
Social Problems 3 credits
Application of sociological principles to major issues in contemporary society.

SOC. 104 Drs. Rielly, Rynn
Cultural Anthropology 3 credits
Cultural and social organization among primitive or preliterate societies; marriage, property, religion, magic and tribal control. Significance of the study of primitive cultures for understanding of urban industrial civilizations.

SOC. 106 Prof. Pryle
Community Organization 3 credits
A general introduction to the field and process of community organization, both as a field of social work and as a field of human endeavor. The coordination and financing of welfare activities, methods of appraising community needs and resources, planning and the initiation of welfare services. Services of a voluntary and governmental nature, strategies of power.

SOC. 107 Prof. Pryle
Child Welfare 3 credits
Development of child welfare in the United States. Educational, health, recreational and child labor regulations. Study and treatment of children in their own homes, foster homes and institutions. Child care and protective programs on federal, state and local level.

SOC. 109 Prof. Pryle
Introduction to Social Work 3 credits
Growth of social work as a professional endeavor. The scope of social work; casework in the medical, psychiatric, family and child welfare, and guidance fields, community organization as exemplified in the United Fund and Planning Council, social research, social planning, social group work. Current trends in social work.

SOC. 110 Drs. Rielly, Rynn
Marriage and the Family 3 credits
An historical, comparative, and analytical study of marriage and family institutions. Problems of courtship, mate selection, and marriage adjustment in modern society.

SOC. 111 Prof. Pryle, Fr. Conlin
Urban Sociology 3 credits
Urban ecology and culture as the dominant form of community life in contemporary society; its characteristics, peculiarities, and problems.

SOC. 114 Staff
American Minority Groups 3 credits
Patterns of adjustment between ethnic and racial groups, with special attention given to the American scene. Prejudice and discrimination as opposed to the democratic ideology.

SOC. 115 Dr. Talamini
Sociology of Work and Professions 3 credits
The nature and role of contemporary professions, occupational choice, career patterns and occupational mobility; the relationship between education, occupation, profession and aspirations.

SOC. 117 Fr. Conlin
History of Sociological Thought I 3 credits
Background and development of sociology with emphasis upon the men and ideas that strongly influenced the discipline; particular emphasis on the works of Comte, Durkheim, Weber, Simmel, Pareto and Marx, and on the social context in which they originated.

SOC. 118 Fr. Conlin
History of Sociological Thought II 3 credits
An examination of major current theoretical developments in sociological theory and a critical review of theories of leading contemporary sociologists.

SOC. 119 Fr. Conlin
Crisis in Population 3 credits
A study of the basic variables of population, birth, death and migration, socio-economic and cultural variables affecting population, growth, projections and forecasts. The chief natural and social demographic theories. Population policies and practices in selected world areas.

SOC. 121 Prof. Pryle
Religion and Society 3 credits
A survey of religious systems and their interrelations with society and social institutions, with emphasis on the social consequences and determinants of religious behavior. The theories of Durkheim, Weber, Parsons, Bellah, Berger and Luckman will be examined.

SOC. 124 Dr. Talamini
Sociology of Sport 3 credits
The role of sport in civilized societies; sport as work and recreation; women and minorities in sport; sport in education; sport and the mass media.

SOC. 127 Prof. Pryle, Dr. Talamini
Medical Sociology 3 credits
The social dimensions of health and illness; role of physician, nurse and patient; social organization of health services; the content of medical practice; culture and health disorders; mental health and mental illness.

H/SO 134 Dr. Feller
Introduction to Archaeology 3 credits
An introduction to the study of archaeology from anthropological and historical perspectives. Areas to be explored include survey and site recognition, excavation planning, record keeping, treatment of artifacts and above-ground archaeology.

SOC. 135 Dr. Rynn
Peoples of East Asia 3 credits
The anthropology of the East Asian culture area, focusing particularly on China and Japan. Topics include basic social institutions, world views, culture and personality, and the problem of modernization.

SOC. 148 Dr. Rynn
Social Psychology 3 credits
Study of individual behavior as affected by cultural and social stimuli. Emphasis on the analysis of human conduct in social settings.

SOC. 150 Dr. Rynn
Industrial Sociology 3 credits
Modern industrialism as social behavior. Social conditions in the rise of industrialism and their effect on the worker; collective bargaining and industrial conflict, the industrial community; social classes and the industrial order.

SOC. 191-192 Staff
Independent Study in Sociology 3 credits
Designed for advanced students who are capable of independent study. A program of planned research under the guidance of a faculty member. Registration upon approval of Chairman of the Department and instructor directing the study.

SOC. 198-199 Dr. Rielly
Internship in Social Work 3 credits
Practicums designed to broaden the educational experience of students through practical experience and work assignments with governmental and/or community agencies in the field of social work. Supervision by a faculty member and agency supervisor. In selected cases a student may receive credit for part time paid experience. In either case, approval of mentor is necessary. Limited to juniors and seniors.

Approved courses from other curricula: Sociology majors may be advised to choose several courses taught in the Criminal Justice sequence—courses subject to such approval include:

S/CJ. 103 Criminology
S/CJ. 113 Juvenile Delinquency
S/CJ. 117 Sociology of Deviance
S/CJ. 104 Victimology
S/CJ. 115 Organized Crime Patterns
S/CJ. 127 Probation & Parole
S/CJ. 123 Law and Society
S/CJ. 116 White Collar Crime
S/CJ. 128 Penology: Corrections
S/CJ. 132 The American Court System
S/CJ. 134 Trial, Jury and Counsel
S/CJ. 146 Introd. Recreation & Leisure

GERONTLOGY COURSES

GERO. 101 Dr. Rielly, Prof. Pryle
Introduction to Gerontology 3 credits
A multi-disciplinary examination of the cognitive and affective aspects of the aging process. The course covers the social, physiological, physchological, economic, and health aspects of aging, as well as service delivery systems. It explores planning and action strategies aimed at enhancing the quality of life, and providing more adequate benefits and services for the elderly.

GERO. 103 Mr. Germain
Health and Aging 3 credits
An explorative study of the mental and physical health problems prevalent in the older adult population, with emphasis upon the preventive aspect of health care as applied by themselves and health care providers. Health care approaches appropriate to the various problems, and relevant resources within the home and community are considered.

GERO. 105 Prof. Pryle
Social Policy and Aging 3 credits
Review of major legislation affecting older adults, including Social Security Act, Older Americans Acts, Medicare, and various local, state, and national programs for the aged.

GERO. 106 Prof. Cimini
Crime and Aging 3 credits
Identification of a variety of legal issues and crimes which have particular impact on the elderly with attention to the ways the aged can use the legal process.

GERO. 107 Prof. Pryle
Aging and the Community 3 credits
Consideration of selected community strategies effecting desired changes in the development and implementation of social services and programs for the elderly: legislative action, inter-agency relationships, the citizen role.

GERO. 109 Mr. Germain
Aging and Human Behavior 3 credits
A critical examination of life satisfaction in old age; the social and psychological factors which affect it; factors contributing to the psychological well-being of older adults as a function of their position in the social system.

GERO. 110 Dr. Rynn
Aging in Anthropological Perspective 3 credits
A cross-cultural approach looking at the ways in which a variety of societies deal with aging and the aged. The relationship among work, economics, other types of expertise, and different definitions of the aged is analyzed.

GERO. 112 Dr. Talamini
Aging and the Life Cycle 3 credits
Rites of passage, age norms, and role rehearsals for life transitions, the life cycle in comparative cultures; sociological dimensions of adulthood and aging concerning the work cycle, sport and leisure development, patterns of consumer behavior and life style, and the family cycle.

GERO. 122 Dr. Rielly, Dr. Talamini
Social Problems of Aging 3 credits
This course is devoted to a study of the specific problems of the aged in American society, with particular attention at both individual and societal levels to issues of age, inequality in opportunities and rewards; of mental health, housing, minorities, and institutions; of crime and fear of victimization; of economic status, work, leisure, and retirement of attractiveness, aging and sexuality; of drugs, doctors, nursing homes and hospitals.

GERO. 126 Dr. Rielly
Aging and Death 3 credits
This course offers the student an opportunity to explore the mystery and meaning of death. Focus is on a number of aspects of dying and the death process, such as the dying individual and the family; cross-cultural perspectives; terminal illness; professions and death; rites and rituals.

GERO. 191 Staff
Independent Study in Gerontology 3 credits
Designed for advanced students who are capable of independent study. A program of planned research in gerontology under the guidance of a faculty member. Registration upon approval of Chairman of the department and the instructor directing the study.

GERO. 198/199 Staff
Practicum in Gerontology 3 credits
Supervised experiential learning in one or more organizations that serve older adults. Supervision by a faculty member and agency supervision required. In selected cases a student may receive credit for part-time paid experience. In either case, approval of mentor is necessary. Limited to juniors and seniors.

THEOLOGY AND RELIGIOUS STUDIES

FR. ROUSSEAU, S.J., *Chairperson*

The religious dimension of human life is of such importance that it must be explored in a liberal arts curriculum.

The General Education requirement for all students at the University is six credit hours in theology. This is fulfilled by T/RS 21-22, a two-semester introductory sequence. Additionally, students must take another six hours in either philosophy or theology/religious studies to complete the GE AREA V requirements. Among other courses, the department offers T/RS 186 Jewish Theological Thought and T/RS 185 The Protestant Faith, which are taught, respectively, by a Jewish rabbi and Protestant minister.

The Bachelor of Arts degree in Theology/Religious Studies requires 30 credits in the major including the introductory courses required of all students. To ensure a well rounded background in the discipline, each major must take at least one course in each of the 5 categories listed below. Each major is expected to confer with the departmental chairperson for the selection and balancing of courses. The department also offers a double major program compatible with most other majors. It has similar requirements. A yearly Senior Seminar will be offered.

Departmental Courses are grouped into the following categories.

Biblical Theology (100-129)
Doctrinal Studies (130-149)
Historical Studies (150-159)
Moral Theology (160-174)
Religion and Society (175-189)

T/RS 21-22 Staff
Theology I-II 3-3 credits
A two-semester introduction to theology. The first semester course focuses on Bible and Tradition, studying key books and themes of the Old and New Testaments, as well as major developments in the history of Christian thought. The second semester course focuses on Creed and Practice, surveying major elements of systematic theology (e.g., Creation and Redemption) and Christian life (e.g., The Sacraments and Morality).

T/RS 100 Dr. Steele
Inside the Old Testament 3 credits
This course is designed to introduce the student to a full range of Old Testament literature with attention to its literary form, historical content and levels of meaning. Readings from the primary sources will be supplemented by secondary readings.

T/RS 101 Staff
Inside the New Testament 3 credits
Similar in format to T/RS 100; selected Pauline epistles, the Gospel of Mark and John I will be principal texts.

T/RS 102 Fr. Bergamo
Introduction to Biblical Exegesis I 3 credits
The individuals, history and literature of the Old Testament, with special emphasis on ancient Near East environment, and the relation of this literature to the biblical books.

T/RS 103 Fr. Bergamo
Introduction to Biblical Exegesis II 3 credits
An examination of the discipline of the Old Testament theology. Critical and exegetical study of selected writings in the Biblical criticism.

T/RS 108 Drs. Steele, Frein
Jesus for the Gentiles: An Introduction to the Gospel of Luke 3 credits
The primary purpose of this course is a close reading of the Third Gospel. Although the primary focus will be on the text rather than on methods of analysis, appropriate attention will be paid to literary forms, historical background and responsible interpretation. (Complements T/RS 101 and 112).

T/RS 111 Fr. Barone
Pauline Letters 3 credits
An introduction to the Apostle of the Gentiles, who preached Christ to the great cities of the Greco-Roman world. Archaeological discoveries relevant to Paul's mission journeys are presented through film and slides.

T/RS 112 Fr. Barone
The Gospels and Jesus 3 credits
An historical-critical study of the synoptic gospels. The historical figure of Jesus of Nazareth as perceived in the resurrection faith of the early Christian communities. Film and slide presentations of archaeological discoveries relevant to New Testament era.

THEOLOGY/RELIGIOUS STUDIES

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	T/RS 21-Elective 22	Theology I/Theology II	3	3
COGNATE	Electives	Electives	3	3
GE AREA I	Nat. Sci./Quant.	Elective		3
GE AREA II	Social/Behavior	Elective	3	
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy		3
GE FREE	Elective	Elective	3	
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	T/RS	Second Year Electives	3	3
COGNATE	Electives	Electives	3	3
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA II	Social/Behavior	Electives	3	3
GE AREA III	Communications	Elective	3	
GE AREA V	Phil. 110	Ethics		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	T/RS	Electives	6	6
COGNATE	Electives	Electives	3	3
GE AREA II	Social/Behavior	Elective	3	
GE AREA IV	Humanities	Electives	6	6
			18	15
		SENIOR		
MAJOR	T/RS	Electives	3	3
COGNATE	Electives	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Philosophy	Philosphy Electives	3	3
GE AREA FREE	Electives	Electives	3	3
			15	15

TOTAL: 127 credits

MINOR. The minor in T/RS requries 12 credits beyond the introductory sequence, preferably spread over several areas. By permission of the chairperson, a minoring student may be admitted to the yearly Majors Seminar.

T/RS 115 Dr. Mathews
Book of Revelation 3 credits
This introduction to the last book of the Bible will emphasize the literary forms and thought patterns of apocalyptic writing as well as the historical and theological character of the book itself. Both textual interpretation and contemporary relevance will be highlighted.

T/RS 120 Fr. Gabuzda
Signs & Symbols 3 credits
This course introduces themes which serve as the basis for a sound sacramental theology. Areas include: symbol/ritual; biblical and liturgical foundations for the sacraments and contemporary trends in sacramental theology.

T/RS 129 Fr. Begley, S.J.
Spirituality: Liturgy and Sacraments 3 credits
A basic course in sacraments which will explore the human religious experience of the faith community and its expression in sacramental celebration. Two features of the Rite of Christian Initiation of Adults, its process orientation and the role of the community, will serve as basis for the examination of new sacramental models. Throughout the course, specific attention will be given to the development of a sacramental spirituality.

T/RS 131 Fr. Coccia
Faith and Reason 3 credits
The problem of faith and reason, that is, intellectual difficulties with belief and the objects of belief, reexamined in the light of contemporary epistemology. An in-depth study, taking in both the problem of truth and the problem of knowledge.

T/RS 133 Fr. Coccia
Christian Spirituality 3 credits
An historical, analytical, appreciative study of the fundamental principles and development of Christian ascetical theology. Traditional concepts such as faith, prayer, sin, conversion, discernment, peace, consolation, desolation, repentance and mortification are examined and evaluated.

T/RS 135 Fr. Sattler
Theology of Love and Marriage 3 credits
Natural and supernatural meaning of love. The theology of vocation, the secular meaning, sign and celebration of Christian matrimony, and the implications for Christian perfection in the calling to marriage and family life.

T/RS 138 Sr. Kopas
Theology of the Person 3 credits
This course studies the religious dimensions of personal existence against the background of Christian tradition and contemporary experience. In the process it develops some of the main themes of a Christian anthropology including creation, salvation and alienation.

T/RS 139 Fr. Bergamo
Theology of the Church 3 credits
An exploration of the concepts of the Christian community from their source in the Bible to the Second Vatican Council. The Church as sacrament and mystery with an emphasis on the period of Vatican II and following.

T/RS 140 Staff
Approaches to God 3 credits
A study of some of the major ways religious thinkers have approached the topic of God. The course will include consideration of biblical, classical, and contemporary ways of understanding God as well as a selection of artistic, cultural, and imaginative perspectives.

T/RS 141 Dr. Benestad
Spiritual Classics 3 credits
A study of the autobiographies of St. Augustine and St. Teresa of Avila (The Confessions and *Life of Teresa of Jesus)*. As an introduction to the study of the spiritual life, John Paul II's *Sign of Contradiction* is read.

T/RS 144 Fr. Sable, S.J.
Introduction to the Theology of the Byzantine Churches 3 credits
The Byzantine theological tradition develops special emphasis within the mainstream of the Christian tradition. This course introduces the student to the study of some of the specifically Byzantine contributions to the understanding of the Christian mystery, with particular emphasis on early developments.

T/RS 145 Fr. Sable, S.J.
Introduction to Eastern Liturgies 3 credits
A survey of the Eastern Eucharistic Liturgies with particular emphasis on the structure, history, and liturgical theology of the Byzantine Liturgy of St. John Chrysostom.

T/RS 146 Sr. Kopas
Jesus the Christ in Tradition and Culture 3 credits
The purpose of this course is to examine the meaning and message of Jesus Christ as understood and communicated in the faith of his followers. Special consideration will be given to symbolic dimensions and cultural aspects of Christian understanding.

T/RS 147 Fr. Levko, S.J.
Eastern Christian Spirtuality **3 credits**
A study of the meaning of the spiritual life for Eastern Christian writers with a particular emphasis upon Sts. Athanasius, Gregory of Nyssa and Gregory Palamas. Themes such as prayer, image and likeness with God, disconcernment of spirits, hesychasm and icons will be discussed.

T/RS 149 Fr. Rousseau, S.J.
Great Christian Ideas 3 credits
A study of the history and current relevance of such great Christian ideas as God, revelation, Christian anthopology, religion, salavation, the Church, and the spiritual life.

T/RS 150 Fr. Linehan, S.J.
Jesuit Spirit 3 credits
The Society of Jesus (Jesuits): Its spirituality, traditions and history from their sixteenth century origins in the Spiritual Exercises of St. Ignatius of Loyola through the contemporary period with special emphasis on Jesuit theological and cultural contributions to the Church.

T/RS 151 Fr. Rousseau, S.J.
The Christian Religious Tradition 3 credits
A study of the vital growth of Christianity's life, doctrine, worship and spirituality over the centuries. Special emphasis will be placed on principal leaders, thinkers and heroes.

T/RS 152 Mr. Yevics
Liturgical Theology of Byzantine Churches 3 credits
Leiturgia as the common action of the people. The various elements of the liturgical life of the Byzantine churches.

T/RS 153 Dr. Benestad
Great Books I 3 credits
Perspectives on Western Culture
The religious, philosphical and political writings of major thinkers of the Western tradition. The first semester includes the study of the Bible, Aristotle's *Ethics,* Plato's *Apology,* Augustine's *City of God,* and the thought of Aquinas. Emphasis is on the study of these works as they illuminate the current world. The scond semester description is found under Phil. 159.

T/RS 154 Fr. Rousseau, S.J.
Religion and the American People 3 credits
An exploration of the great religious developments, persons, and questions in the life of the American people from the beginnings to the present day.

T/RS 155 Dr. Benestad
Introduction to the Greek Fathers 3 credits
Using primary sources, this course provides an introduction to major themes of the Greek Fathers. Justin's *Apology, Against Heresies* by Irenaeus, *Christ the Educator* by Clement of Alexandria, *On the Incarnation* by Athanasius, the *Lord's Prayer* and the *Beatitudes* by Gregory of Nyssa. Basil's *Moralis* and *Letters* and Nazianzen's *Theological Discourses.*

T/RS 156 Fr. Linehan, S.J.
Monks in Civilization 3 credits
The monastic tradition in the Church from its desert origins through the era of Benedict and his **Rule,** and its development in the lives and accomplishments of such figures as Dominic, Francis, Ignatius and Vincent de Paul, up to modern times with emphasis on the influence of monasticism on the life of the Church.

T/RS 157 Fr. Linehan, S.J.
Christian Apostles and Prophets 3 credits
An inquiry into the nature of Christian sanctity by an examination of the lives and accomplishments of traditional saints and of contemporary persons who respond to the gospel message.

T/RS 158 Staff
Women in Christianity 3 credits
An exploration of some of the major roles women have played in Christian thought and experience, including their contributions as disciples, spiritual guides, and social critics. The course will also examine assumptions about male and female natures and will consider current challenges to traditional roles.

T/RS 162 Dr. Benestad
Christian Ethics in the Modern World 3 credits
This course will discuss the practice of the Christian moral life in contemporary society. The Christian virtues will be distinguished and related to selected problems arising in our lives as private individuals, as members of families, as professionals and as citizens. Other topics to be treated include: evil, sin, Christian liberty, Christian perfection, relativism and humanism.

T/RS 163 Prof. Casey
The Church and Contemporary Social Issues 3 credits
Explores the religious and ethical dimensions of social issues such as prejudice and violence. The findings of related social sciences and literature are placed in the context of Christian anthropology to give the student a concrete view of their interrelationship.

T/RS 164 Dr. Benestad
Social Ethics 3 credits
This course will prepare students to recognize ethical dimensions of political, economic and social issues through the study of the following: pertinent writings of Pope Paul VI and Pope John Paul II, a classic work of political theory, and several contemporary writings on such issues as morality and foreign policy and economic justice.

T/RS 165 Staff
Moral Theology 3 credits
This is a study of the Christian moral tradition, its validity as a lien on conscience, its evolution and permanence. Specific areas treated will include obedience to the Church, the family, sexual activity and attitudes, the "rights of truth," human rights.

T/RS 166 Dr. Benestad
John Paul II and Catholic Social Thought 3 credits
This course will explore the dialogue between the Catholic Church and modern ideologies on social and political matters. Readings include pertinent documents of the Second Vatican Council and recent papal writings, especially those of Pope John Paul II.

T/RS 174 Dr. Steele
Suffering 3 credits
The existence of suffering and evil presents a particular problem for those who believe in a God who is unlimited both in power and goodness. This course will examine the problem and possible solutions through analysis of the Book of Job, Walker Percy's *Second Coming,* and New Testament selections.

T/RS 175 Fr. Rousseau, S.J.
Contemporary Case Studies in Theology 3 credits
By analyzing several concrete, contemporary "cases," this course will attempt to clarify the theological framework and the Christian issues involved in such situations and so to increase one's ability to look at life out of a genuinely Christian context.

T/RS 176 Rabbi Shoop
Theology of the Holocaust 3 credits
A course dealing with historical, religious and psychological elements of the Holocaust. The course will treat the writings of many of the contemporary theological thinkers in their treatment of man's inhumanity to man. The course will treat both Christian and Jewish theological responses to the Holocaust. The problem of evil in the universe will be anlayzed in the framework of the Holocaust.

T/RS 178 Prof. Osterle
Theology and the Global Village 3 credits
A theological reflection on world food/hunger issues as related to religious belief and action. The role of the responsible Christian and Jew in an interdependent world is explored; the implications of progress for a simplification of life style in a just world order.

T/RS 179 Prof. Osterle
Peace Theology and the Arms Race 3 credits
Examination of the religious conviction that peace cannot be based upon weapons. An investigation of contending perspectives on arms and disarmament; reflection of Christian responses to war/peace and the fundamental relationship of peace education to human development.

T/RS 180 Prof. Casey
Politics: A Christian Perspective 3 credits
An inquiry into the role of the state, the Church and the individual in political life. Special attention is given to the problem of violence; the course is set in the unique American perspective of Church-State Relations.

T/RS 185 Wanck
The Protestant Tradition 3 credits
This course will explore the Reformation vision of theology. It will cover the roots and principles of the Protestant way of dealing with such topics as the nature of the Church, redemption, ethics, God and Jesus.

T/RS 186 Rabbi Shoop
Jewish Theological Thought 3 credits
The nature, creeds, and institution of Judaism. The God Concept, Man and His Will, the Nature of the Good, the Destiny of Man, the Shadow of Sin.

T/RS 190 Dr. Benestad
Biomedical Ethics 3 credits
This course will present theological reflections on the two main ethical theories undergirding contemporary biomedical ethics. It will also present and discuss relevant philosophical and theological arguments on such issues as abortion, care of handicapped infants, euthanasia, suicide and the profession of medicine.

T/RS 191 Staff
Senior Seminar 3 credits
A small class (limit 12) for advanced discussion, writing and research reserved for Seniors and requiring the written approval of the chairperson of the dept. There will be a series of rotating topics taught by different members of the Theology/Religious Studies Department.

INTERDISCIPLINARY COURSES*

INTD. 17 Drs. Homer, McInerney
Great Lives: Images on Stage and in History 3 credits
An examination of the often contrasting impressions of historical personalities, as they are portrayed in plays and films and as they appear to historians. Historical figures to be considered include Caesar, Richard III, Thomas More, Lincoln and Churchill.

INTD. 24 Staff
Parenting 3 credits
Integrating the disciplines of psychology and literature, this course is designed to increase one's capacity to be a good parent. Fiction is used as discussion source for learning about child development, family relations, and parent education.

INTD. 26 Profs. Babcock, Baillie, Benestad
Is Capitalism Christian? 3 credits
A philosophical, theological, and economic inquiry into the nature of Capitalism and the nature of Christianity to determine the compatibility between them.

INTD. 32 Drs. Carey, Vinson
Science and the Human Environment 3 credits
A brief study of the effects of the technological, scientific and industrial progress on the air, land and water resources of the human environment. Problems in each of the resource areas will be discussed in detail.

INTD. 33 Dr. Parson, Champney
Politics and Literature 3 credits
A consideration of the nature of politics and political argument, a discussion of literature as a forum for political argument. Analysis of Latin American novels for the use of political and literary symbols.

INTD. 38 Staff
The Vietnam Experience 3 credits
The historical origins of the Vietnam War including the period of French colonialism and the American intervention; the politics, economics, and military strategy in Vietnam during the war years and today. Present relations with China and the USSR. Why were we there and why did we fail?

INTD. 40 Staff
The American Experience 3 credits
An examination from the perspectives of History and Literature/Drama of the elements that have shaped our present culture, and an analysis of the trends that may predict our future.

INTD. 41 Dr. Baril, Prof. S. Casey
Science and Society 3 credits
This course would attempt to show how the sciences, particularly the behavioral sciences, impact both positively and negatively on society. Issues dealt with would include the nature of science, similarities and differences between the scientific disciplines, the impact of science on the concept of free will, and the philosophical and moral implications of psychological testing, socio-biology, and Skinnerian radical behaviorism.

INTD. 42 Dr. Beal, Staff
Theology & Literature 3 credits
A study aimed at deepening students' appreciation of the literary experience and its capacity to reveal human religious capabilities. Readings, lectures, discussions and films will focus on human freedom as a vehicle to personhood, community and God.

INTD. 44 Profs. Lawhon, Ledford-Miller
American Minorities 3 credits
Examination of racial and ethnic groups from the settlement of America until the present day. Examination of the historical context and current situation of Native Americans, Blacks, Immigrants, political Exiles, Mexican-Americans, and Women-as-minority. Readings from literature and other areas will include such writers as Angelou, Arenas, Cather, Gordon, Goytisolo, and Rodriguez.

NCS1. 10 Prof. Kalafut
History of Science and Technology 3 credits
A course for non-science majors that traces the evolution of scientific inquiry from the pre-Socratics to the present. The central ideas that enable man to understand and control the forces of nature and develop modern technological societies are examined. Selections from the classics in science will be studied. (No prerequisites.)

*Interdisciplinary courses are team-taught courses which vary from semester to semester. They may be used to fulfill appropriate General Education requirements.

The School of Management

Dr. Joseph Horton, Dean

The School of Management combines the traditional Jesuit emphasis on the liberal arts with a solid foundation in business. Its program of study follows the standards of the American Assembly of Collegiate Schools of Business, providing a strong background in all the functional aspects of business, as well as in-depth preparation in an area of specialization.

GOALS AND OBJECTIVES

The primary goal of the School of Management is to prepare future leaders for business and such other sectors of society as governmental and non-profit institutions requiring managerial talent, leaders who have a broad knowledge of the methods and processes of professional management and an informed understanding of the interrelationships between the professional world and society at large. The manager is not only a decision maker, but is also the leader responsible for the implementation of decisions and the evaluation of results.

Therefore, the undergraduate program of study seeks to accomplish the following objectives:

1. **Liberal Arts:** To provide students with a broad liberal arts foundation, that their knowledge, skills, attitudes and values may have a human and social dimension as well as a professional dimension.
2. **Professional Core:** To provide students with a sound background knowledge of the theory and practice of modern management, to begin the development of skills needed for successful managerial careers, and to develop an openness to the attitudes, values and commitments that society rightly expects of professionals.
3. **Specialized Professional Interest:** To provide students with the opportunities for specialized professional work in specific discipline areas.
4. **Personal Development:** To provide students with opportunities of developing their knowledge, skills and commitment to their professions and to society by involving them in varied non-classroom endeavors such as participation with faculty on community service projects, internships and other professional extra-curricular opportunities.
5. **Community Service:** To encourage faculty and students to serve the community through research and investigation of regional management problems.

DEPARTMENTAL PROGRAMS

Six programs are available: Accounting-Track in Financial Accounting, Accounting-Track in Managerial Accounting, Finance, Management, Marketing, and Production & Operations Management. These programs prepare the student for a career in business or for graduate study. Except for the requirements of the major and the business core, the student in the School of Management will adhere to the same regulations as the student in the other undergraduate colleges. Apart from minor exceptions, which require the explicit approval of the Dean of the School, the student will spend the senior year in residence at the University.

MINOR IN GENERAL BUSINESS

A minor in General Business is available to non-business students. It will consist of 21 credits:

ECO. 101	Essentials of Economic Theory
ACC. 3-4	Financial & Managerial Accounting
MGT. 9	Legal Environment of Business
MGT. 108	Organization & Management
MGT. 116	Organizational Behavior
MKT. 107	Managerial Marketing

These are the courses that are required in five of the six foundation areas for the MBA program in the Graduate School. The last three courses must be taken after the other courses and no earlier than the junior year.

BUSINESS COGNATE

Non-business students with special needs may pursue a personal cognate in business. With the approval of his or her advisor, the student is free to select a variable number of business courses; however, the prerequisites stated in the catalog must be observed, and upper division courses may not be taken before the junior year.

MATH OPTIONS FOR BUSINESS MAJORS

Business majors are advised to take as high a level of math as they can handle at a performance level of C or higher. This will be an advantage in the job market and in graduate studies.

OPTION A: Recommended to students who have achieved a B+ average in high school math through Precalculus and have a minimum SAT score of 600.

SEMESTER I	SEMESTER II	SEMESTER III
Math 14 (4 cr)	Math 21 (4 cr)	Math 22 (4 cr)
Analysis I	Analysis II	Analysis III

OPTION B: Recommended to students who have achieved a B+ average in high school math through Trigonometry and have a minimum SAT score of 550.

SEMESTER I	SEMESTER II	SEMESTER III
Math 13 (4 cr)	Math 14 (4 cr)	Math 21 (4 cr)
Pre-calculus	Analysis I	Analysis II

OPTION C: Minimum level of math required for a business major, to be taken by students who do not qualify for options A or B. Students are advised that Math 1, 2 or 5 may **not** be applied toward degree requirements.

SEMESTER I	SEMESTER II	SEMESTER III	SEMESTER IV
Math 6 (3 cr)	Math 7 (3 cr)	Math 8 (3 cr)	Area I el. (3 cr)
Quant.	Quant.	Mathematics	Natural
Meth. I	Meth. II	of Finance	Science

Students may change the math option assigned with permission of the Assistant to the Dean of the School of Management.

Barbara Gleason, Assistant to the Dean, and
Professor George Babcock, Associate Dean of the School of Management.

PROGRAMS OF STUDY

LOWER DIVISION

The curriculum in the lower division is the same for all programs. Note that in the SOM the COGNATE area is called the BUSINESS CORE.

FINANCE

	Dept. and No.	Descriptive Title of Course	Credits FALL		SPRING
		FRESHMAN			
BUS. CORE	Econ. 11-12	Principles of Economics I-II	3		3
GE AREA I	Math	Math Option††	3/4		3/4
GE AREA III	Communications#	Electives	3		3
GE AREA IV	Humanities	Electives	3		3
GE AREA V	Phil. 20-T/RS 21	Introduction to Philosophy-Introduction to Theology	3		3
PHYS EDUC	Ph.Ed.	Physical Education	1		1
			16/17		16/17
		SOPHOMORE			
BUS. CORE	Acc. 1(3)-2(4)**	Elementary Accounting Sequence	3		3
BUS. CORE	QMS 15-16	Statistics for Business I-II	3		3
BUS. CORE	Mgt. 9†	Legal Environment of Business	3	or	3
GE AREA I/IV	Math*/Comm. 103*	Math Option†/Logic & Rhet. Anal.	3/4		3
GE AREA III	CMPS 21*†	Intro. to Computer Science	3	or	3
GE AREA V	Phil. 110-T/RS 22	Ethics-Theology II	3		3
GE AREA I	Nat. Sci. El.	Math Option C††			3
PHYS. EDUC.	Ph.Ed.	Physical Education	1		1
			16/17		16/19

*Recommended.

**Accounting and Finance majors take Acc. 1-2; Financial Accounting I, II. Other business majors take Acc. 3, 4; Financial Accounting, Managerial Accounting.

†Accounting majors should take Mgt. 9 in the Fall and CMPS21 in the Spring; other business majors should reverse this order.

††See Math Option of business students.

#Fundamentals of Speech (COMM 2) and Composition (ENGL. 7) are required except for students who receive AP credit or are certified by exam as satisfying the Communication Skills requirements.

UPPER DIVISION
SPECIAL TOPICS COURSES

Special topics courses are offered in each department. The course numbers below will be prefixed with the appropriate department abbreviation.

Seminar: 182-183
(Prerequisite: Senior Standing) This course will discuss topics for current concern in a specialized field, and will be conducted in seminar fashion. Content and emphasis will vary from year to year, but will always be up-to-date.

Guided Research for Independent Study: 195-196 3 credits
(Approval of Chairperson and Dean required) Content determined by mentor in specialized field.

Internship: 198-199 3-6 credits
(Approval of Chairperson and Dean required)

ACCOUNTING

DR. R.J. GRAMBO, *Chairperson*

Accounting accumulates and interprets the quantitative data necessary for appraising and controlling business operations and for sound decision making. The Financial Accounting Track is appropriate for the student interested in a career in public accounting. The public accountant is concerned with the preparation and reporting of financial statement information to users outside the organization. Students going into public accounting should consider seeking CPA (Certified Public Accountant) certification. The Managerial Accounting Track is the appropriate choice for a student wanting a career in management accounting. Emphasis here is on the use of accounting information for decision making within the organization. The CMA (Certified Management Accountant) is the appropriate certification in this area.

ACCOUNTING

Financial Accounting Track

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		JUNIOR		
MAJOR	Acc. 21-23	Intermediate Accounting I-II	3	3
MAJOR	Acc. 123-121	Federal Taxes, Auditing	3	3
BUS CORE	Mgt. 108-116	Organization and Management-Organizational Behavior	3	3
BUS CORE	QMS 109-115	Intro. to Mgt. Science—Production and Op. Mgt.	3	3
BUS CORE	Fin. 110-MKT 107	Intro. to Finance—Managerial Marketing	3	3
GE AREA II	SOC. 21*	Princ. of Sociology	3	
BUS CORE	ECO 103	Environment Intl Bus		3
			18	18
		SENIOR		
MAJOR	Acc. 117-115	Advanced Acctg., Cost Acctg.	3	3
MAJOR	Maj. El. Maj. El.	Advanced Acctg. Electives	3	3
BUS CORE II	Mgt. 180	Policy & Planning	3	
GE AREA II	Psych 23*	Fund. of Psych.		3
GE AREA IV	Humanities	Electives	3	6
GE AREA V	T/RS-Phil. 133	Elective-Business Ethics	3	3
GE FREE	Elective	Elective	3	
			18	18

TOTAL: 139 credits

Managerial Accounting Track

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		JUNIOR		
MAJOR	Acc. 21-23	Intermediate Accounting I-II	3	3
MAJOR	Acc. 115-128	Cost Acctg.-Fedl. Taxes of Corp.	3	3
BUS CORE	Mgt. 108-116	Organization and Management—Organizational Behavior	3	3
BUS CORE	QMS 109-115	Intro. to Mgt. Science—Production and Op. Mgt.	3	3
BUS CORE	Fin. 110-MKT 107	Intro. to Finance—Managerial Marketing	3	3
GE AREA II	SOC 21*	Princ. of Sociology	3	
BUS CORE	ECO 130	Environment Intl. Bus		3
			18	18
		SENIOR		
MAJOR	Acc. 125, Maj. El.	Adv. Mgrl. Acctg., Adv. Acc. El.	3	3
MAJOR	Maj. El., Maj. El.	Advanced Acctg. Electives	3	3
BUS CORE II	Mgt. 180-PSYCH 23*	Policy & Planning-Fund. of Psych.	3	3
GE AREA IV	Humanities	Electives	3	6
GE AREA V	T/RS-Phil. 133	Elective-Business Ethics	3	3
GE FREE	Elective	Elective	3	
			18	18

TOTAL: 139 credits

*Recommended.

Major electives for the Financial Accounting Track are ACC 14, 124, 126, 128 and 198. Major electives for the Management Track are ACC 117, 121, 122, 127, 198; ECO 117; FIN 173, 179 and MGT 142.

ACC. 1 Staff
Financial Accounting 1 3 credits
(For Acc. & Fin. majors) A survey of accounting principles, concepts and procedures. Includes financial statements, information processing cycle, voucher system, receivables, inventory costing methods, plant and equipment, and intangibles.

ACC. 2 Staff
Financial Accounting II 3 credits
(Continuation of Acc. I for Acc. and Fin. majors) A study of accounting principles relevant to payroll accounting liabilities, partnerships, corporations and investments. Also, techniques required in compiling and interpreting data to be used in decision making including funds flow, budgeting and cost analysis. The use of computers in accounting will be introduced.

ACC. 3 Staff
Financial Accounting 3 credits
(For non-accounting majors) A survey of the topics in Acc. 1 and 2. Coverage is directed toward the reporting of financial information to interested parties.

ACC. 4 Staff
Managerial Accounting 3 credits
(Continuation of Acc. 3 for non-accounting majors) Accounting techniques required in compiling and interpreting selected data for decision making. Includes such areas as cash and working capital flows, profit planning, statement analysis, capital investment decisions, planning and controlling operations.

ACC. 14 Prof. Dragotto/Staff
Law for Accountants 3 credits
(Prerequisite Mgt. 9) A study of the law of personal property, bailments, commercial paper agency sales, and real property.

ACC. 21 Drs. Carpenter, Mensah/Staff
Intermediate Accounting I 3 credits
(Prerequisite Junior standing, Acc. 2) A comprehensive study of contemporary accounting theory, concepts and procedures and their application of the asset classifications on the balance sheet. Current pronouncements of the various accounting organizations relevant to assets will be emphasized.

ACC. 23 Drs. Carpenter, Mensah/Staff
Intermediate Accounting II 3 credits
(Prerequisite Acc. 21) Application of contemporary accounting theory to liabilities and stockholder's equity classifications of the balance sheet. Current pronouncement of accounting organizations.

ACC. 101 Staff
Survey of Managerial & Financial Accounting 3 credits
This course is intended only for MBA students needing prerequisites in accounting and for non-business majors taking cognate credits in business. The course covers reporting financial information and accounting techniques for decision making, planning, and controlling operations.

ACC. 115 Dr. R.J. Grambo/Staff
Cost Accounting 3 credits
(Prerequisites: junior standing, Acc. 2) Theories, techniques and procedures in cost accumulation, reporting and control, including such topics as job order costs, process costs, by-products and joint-products costing, and standard cost and variance analysis.

ACC. 117 Dr. Zandarski/Staff
Advanced Accounting I 3 credits
(Prerequisite: Acc. 23) The theories and promulgated standards of accounting related to multiple business units, including purchase versus pooling theory, consolidated income, minority interest, the use of equity method for unconsolidated investments, and branch accounting.

ACC. 121 Dr. R.J. Grambo/Staff
Auditing Theory 3 credits
(Prerequisite Acc. 2) A review of generally accepted accounting principles and applicable auditing principles, standards and procedures. Auditing original records and assets. Automation and the examination of electronically prepared records. Preparation of work papers.

ACC. 122 Dr. R.J. Grambo/Staff
Management Auditing 3 credits
(Prerequisite: Acc. 23) An in-depth examination of the accountant in the manager's position. Administrative effectiveness and efficiency as provided through sound internal controls. Design and implementation of monitoring systems within the organization to promote better cost/benefit decisions.

ACC. 123 Prof. Gabello/Staff
Federal Taxes 3 credits
(Prerequisite: Junior standing, Acc. 2) An introductory course covering pertinent phases of federal

income taxation. Emphasis on business transactions, preparation of individual, partnership and corporate returns and finding the answers to federal tax questions.

ACC. 124 Dr. R.J. Grambo/Staff
Advanced Auditing 3 credits
(Prerequisite: Acc. 23) A study of the role computers play in the auditor's environment with an analysis of EDP controls and systems analysis related to the external audit process. Advanced statistical sampling techniques, flow charting and audit program preparation will be covered.

ACC. 125 Staff
Advanced Managerial Accounting 3 credits
(Prerequisite: Acc. 115) Accounting techniques as control devices in business with emphasis on use of accounting data in business decisions. Topics to include budgeting and profit planning, cost profit volume, profit analysis and direct costing.

ACC. 126 Dr. Zandarski/Staff
Advanced Accounting II 3 credits
(Prerequisite: Acc. 23) A study of advanced accounting concepts including the international operations, partnerships, fiduciary and institutional accounting, special sales contracts, installment sales and consignments. 3 hours lectures.

ACC. 127 Dr. R.J. Grambo/Staff
Accounting Information Systems 3 credits
(Prerequisite: Acc. 23) The design and application of accounting systems in both the manual and automated environments. Analysis of information's accumulation and use patterns in organizations with a focus on providing useful and timely information. Extensive computer usage of Professional Business Software.

ACC. 128 Staff
Federal Taxation of Corporations and Partnerships 3 credits
(Prerequisite: Acc. 2) An introduction to the taxation of corporations and partnerships including analyses of the tax consequences of the formation, operation and liquidation of regular corporations. Subchapter 5 corporations and partnerships.

Dr. R. J. Grambo CPA, Chairperson

ECONOMICS/FINANCE

DR. GIUNTA, *Chairperson*

The practitioner in finance must be familiar with the tools and techniques available, and, given the resources and constraints of the organizations and the general economic environment in which the organization operates, be adept at efficiently managing the fiscal resources of the organization, including the raising of funds and their short-term and long-term investment. Career opportunities in Finance include:

Banking	Investments	Corporate
Bank Examiner	Financial Analyst	Financial Analyst
Economic Analysist	Security Broker	Working Capital Management
Trust Officer		

FINANCE

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		JUNIOR		
MAJOR	Econ. 117-118	Intermediate Economics I-II	3	3
BUS. CORE	Econ. 103	Environment of Intl. Bus	3	
MAJOR	Fin. 111	Working Capital Mgt.		3
GE AREA II	Psych. 23*	Fund. of Psychology	3	
MAJOR	Fin. 120	Investments		3
BUS CORE	Mgt. 108-116	Organization and Management-Organizational Behavior	3	3
BUS CORE	QMS 109-115	Intro. to Management Science-Production & Op. Mgt.	3	3
BUS CORE	Fin. 110-MKT. 107	Intro. to Finance-Managerial Marketing	3	3
			18	18
		SENIOR		
MAJOR	E/F 160-Maj. Elec.	Money & Fin-Econ Elective	3	3
MAJOR	Fin. 112-Maj. Elec.	Capital Inv. & Struct.-Econ. Elective	3	3
BUS CORE	Mgt. 180	Policy/Planning	3	
GE AREA II	Soc. 21*	Prin. of Sociology		3
GE AREA IV	Humanities	Electives	3	6
GE AREA V	T/RS-Phil. 133	Elective-Business Ethics	3	3
GE FREE	Elective	Elective	3	
			18	18

TOTAL: 139 credits

*Recommended

ECON. 10 Prof. Corcione/Staff
Contemporary Economic Issues 3 credits
(Open to SJLA students only) An examination, in the context of a formal economic perspective, of critical issues in the U.S. economy; unemployment, poverty, inflation, economic growth & productivity, trade & protectionism. In addition, such social programs as social security, unemployment compensation and guaranteed annual income will be studied.

ECON. 11 Staff
Principles of Economics I 3 credits
Determinants of aggregate economic activity. The main areas studied are the monetary and banking system, the composition and fluctuations of national income all as influenced by monetary and fiscal policy.

ECON. 12 Staff
Principles of Economics II 3 credits
This course centers on the salient characteristics of the modern American economy. Operations of the price system as it regulates production, distribution, and consumption, and as it is in turn modified and influenced by private groups and government. International economics.

ECON. 101 Staff
Essential of Economic Theory 3 credits
(Open to non-business majors only) The stress will be on the economic theory and public policy implications. The topics will include the economic theories and policy options for stabilization of the economy; the price system as it regulates production, distribution and consumption and as it in turn is modified and influenced by private groups and government.

ECON 103 Prof. Trussler/Staff
Environment of International Business 3 credits
(ECO 11 & 12; junior standing) This course introduces the student to the growing field of international business, touching on the economic, social and political environments of international trade and multinational corporations. International institutions and agencies that impact on international business are discussed. Both the theoretical and practical aspects of these topics are emphasized.

ECON. 117 Dr. Ghosh/Staff
Intermediate Economics I 3 credits
(Prerequisite: Junior standing, Econ. 12) This course centers on the analysis of production and cost theories. The topics studied are pure competition monolopy, oligopoly, monopolistic competition factor pricing, resource allocation, and income distribution.

ECON. 118 Dr. Ghosh/Staff
Intermediate Economics II 3 credits
(Prerequisite: Junior standing, Econ. 11) Course centers on the study of national income accounting, price level fluctuations, problems of full employment and impact of monetary and fiscal policy on income level and distribution.

ECON. 159 Dr. Bose/Staff
Public Finance and Taxation 3 credits
(Prerequisite: Econ. 118) Government expenditures, budgets, intergovernmental fiscal relations, public debt, fiscal policy, and the principles of taxation.

EC/FIN. 160 Dr. Corcione/Staff
Monetary & Financial Economics 3 credits
(Prerequisite: Econ. 118) This course emphasizes the interrelations between financial markets and the commercial banking system, and aggregate economic activity. The course relies on the tools of modern economics and finance to explain macro-economic activity, the behavior of individual depository institutions, the money "supply," and other subjects that occupy the subject matter of money and banking.

FIN 110 Dr. R.W. Grambo/Staff
Introduction to Finance 3 credits
(Junior standing ACC 2 or 4 ECON 12) This course introduces the business student to the field of Finance. It serves as the foundation course for financial principles used in both financial management and investment courses. Topics include time value of money, risk analysis, basic operation of the capital markets, current asset and liability analysis, and introduction to the topics of capital budgeting and cost of capital calculation.

FIN 111 Dr. R.W. Grambo/Staff
Working Capital Management 3 credits
(FIN 110) This course is designed to give advanced study in the financial management area through detailed analysis of financial statements, liquidity crises, cash optimization, credit analysis, banking arrangements, loan contracts, commercial paper, and the use of money market.

FIN 112 Dr. Puri/Staff
Capital Investment and Structure 3 credits
(FIN 110) Advanced study in the "permanent" financial aspects of the firm including capital budgeting models, optimal replacement processes, abandonment, leasing, cost of capital, capital structure, mergers and acquisitions, and bankruptcy.

FIN 120 Dr. Puri/Staff
Investments 3 credits
(FIN 110) An introduction to the theory and process of managing investments. Topics include practical operation of the equity markets, debt options, and futures markets. Stock valuation models using fundamental technical and random walk approaches.

FIN 121 Dr. Hussain/Staff
Speculative Markets 3 credits
(FIN 120) Advanced work in speculation, hedging and arbitrage. Use of speculative markets for profit and risk adjustment. Options and futures pricing models, financial and index futures, and options, precious metals, and foreign exchange.

FIN 122 Dr. Hussain/Staff
Portfolio Management 3 credits
(FIN 120) Advanced study of professional management of various portfolios including those of banks, insurance companies, pension funds, and non-profit institutions. Markowitz and Sharpe models, data availability, and computerized data services are covered.

FIN 130 Staff
Financial Institutions 3 credits
(ECO 118) Integration of financial companies into the macroeconomic environment. Topics include operations of the Treasury and the Federal Reserve Board, commercial banks, and savings institution operations. Bank management problems, including reserves management and loan analysis are covered. Life insurance and pension principles, and investment banking are covered.

FIN 140 Dr. Giunta/Staff
International Finance 3 credits
(ECO 103, 117 & 118) Trade principles, roles of banks in trade, exchange rates and markets, international liquidity management. Regional analysis of U.S. and Canada, E.E.C., Pacific Basin, South America, South Asia, Africa, and the Communist block.

MANAGEMENT / MARKETING

PROF. HEWITT, *Chairperson*

The field of MANAGEMENT is concerned with the management of human resources within the organization. It coordinates the selection, motivation and development of the organization's human resources. Career opportunities include:

Human Resources Testing & Research
Industrial Relations
Job Analysis & Evaluation
Manpower Planning
Personnel Director
Training Director
Wage & Salary Administration

The field of MARKETING concerns itself with the planning, pricing, promotion and distribution of goods and services. Career opportunities in this field include:

Advertising and Promotion
International Marketing
Marketing Research
Physical Distribution
New Product Planning
Product & Brand Management
Retailing Management
Sales & Sales Management

MANAGEMENT

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		JUNIOR		
MAJOR	Mgt. 140	Personnel Management		3
MAJOR	Mgt. 141	Labor Relations		3
BUS CORE	Mgt. 108-116	Organiz. & Mgt.-Org. Behavior	3	3
BUS CORE	QMS. 109-115	Intro. Mgt. Sci.-Prod. & Op. Mgt.	3	3
BUS CORE	Mkt. 107-Fin. 110	Mgrl. Mktg.-Intro. to Finance	3	3
GE AREA IV	Humanities	Elective	3	
BUS CORE	Eco 103	Environment Intl Bus	3	
			15	15
		SENIOR		
MAJOR	Mgt. 142-182	Organizat. Theory-Seminar	3	3
MAJOR	Mgt. El.-Mgt. El.	Advanced Mgt. Electives	3	3
BUS CORE	Mgt. 180	Policy and Planning		3
GE AREA II	Soc. 21*	Principles of Sociology		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T / RS-Phil. 133	Electives	3	3
GE FREE	Elective	Elective	3	
GE II	Psych. 23*	Fund. Psychology	3	
			18	18
			TOTAL: 133 credits	

*Recommended

MGT. 9 Prof. Wormuth / Staff
Legal Environment of Business 3 credits
The nature, sources, formation, and applications of law. The judicial function, the court system, litigation and other methods of resolving disputes, legislation law from judicial decisions, law by administrative agencies, regulation of business activity, antitrust law, consumer protection, environment and pollution control.

MGT. 108 Staff
Organization and Management 3 credits
(Prerequisite: Junior standing) The major concepts of managerial action deal with planning, organizing, directing, and controlling. Knowledge of these key aspects of the management process will provide the student with a framework for decision making.

MGT. 116 Staff
Organizational Behavior 3 credits
(Prerequisite: Mgt. 108) Investigates the field of organizational behavior in order to appreciate how work performance is affected by a variety of factors. Individuals, groups, and organizations, as they relate to organizational behavior, will be studied.

MGT. 140 Dr. Biberman/Staff
Personnel Management 3 credits
(Prerequisite: Mgt. 108) This course will describe and explain the preparation of job descriptions, demographics of labor resources, recruitment policies, interviewing techniques, hiring contracts, aptitude testing and performance evaluation, labor turnover and labor mobility, employee morale, complaints and grievances, disciplinary procedures, employee health and safety, wage and hour administration, and government regulations relating to labor. The handling of absenteeism, alcoholism, and drug addiction, and other functional duties of a personnel department will also be covered.

MGT. 141 Dr. Corcione/Staff
Labor Relations 3 credits
(Prerequisites: Mgt. 108, Econ. 12) This course will focus on the factors in our economy contributed by human labor, the benefits which labor obtains from its efforts, the definition of what labor is and how it evolved and matured into a dynamic, vocal constituent of our current industrial society. A major part of the course will deal with labor compensation, wages and benefits, and how they are determined and negotiated. The position of unions in the current labor picture, current attitudes toward miniorities in the labor force, discrimination and prejudices, will also be evaluated.

MGT. 142 Staff
Organization Theory 3 credits
(Prerequisites: Mgt. 108, 116) Study of the forces both within and outside the organization that determine the structure and processes of an organization. Topics to be covered will include technology and size influences, conflict, boundary roles, matrix structure, political factors and sociotechnical systems.

MGT. 143 Dr. Biberman/Staff
Group Dynamics 3 credits
(Prerequisite: Mgt. 108 or permission of instructor) Survey and analysis of constructs, research and applications of small group phenomena in an organizational context. Examines the various theories, research measurements and observational methods used in studying groups. Students will be able to explore their own behavior in groups by participating in various groups and/or by observing others in group experiences. The course will prepare students to be effective in groups.

MGT. 145 Prof. Hewitt/Staff
Women in Management 3 credits
(Prerequisite: Mgt. 108 or permission of instructor) A seminar exploring the new opportunities for women in management and the special skills and insights needed by them to take full advantage of such opportunities.

MGT. 148 Staff
Organizational Social Responsibility 3 credits
(Prerequisite: Mgt. 108 or permission of the instructor) This course is designed to introduce students to basic concepts which underlie the social responsibility aspect of the management process. The role of pluralism is examined in the societal system to provide an understanding of the evolving relationship between organizations and society as a whole. The essential nature of the managerial approach is explored in the light of the increasing importance of societal impact on the organization.

MGT. 168 Staff
International Business 3 credits
(Prerequisite: Mgt. 108) Examination is made of the economic, financial, legal, political and cultural setting of international business. Investigates problems, policies and operations of multinational enterprises on such issues as stratgic planning, organizational structure, and political risk management. The purpose of the course is to introduce the student to the key concepts and tools that are important to understanding the nature and management of multinational enterprises.

MGT. 180 Drs. Adams, Harris, Staff
Policy and Planning 3 credits
(Prerequisites: Seniors only, Fin. 110, QMS. 115, MGT. 116, MKT. 107) This is the capstone course for all business majors. Concepts and skills developed in the prerequisite courses are integrated and applied to the overall management of an organization. Topics will include setting objectives, designing strategic plans, allocating resources, organizational structuring and controlling performance.

MARKETING

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		JUNIOR		
GE AREA IV	Humanities	Elective	3	
MAJOR	Mkt. 130	Marketing Research		3
BUS CORE	Eco. 103-	Environm. of Intl. Bus.-	3	
MAJOR	Mkt. 132	Buyer Behavior		3
BUS CORE	Mgt. 108-116	Organization and Management-Organizational Behavior	3	3
BUS CORE	QMS. 109-115	Into. to Management Science-Prod. and Op. Mgt.	3	3
BUS CORE	Mkt. 107-FIN. 110	Managerial Marketing-Intro to Finance	3	3
			15	15
		SENIOR		
MAJOR	Mkt. 131-Mkt. Sem.	Marketing Communications-Mkt. Seminar	3	3
MAJOR	Mkt. El.-Mkt. El.	Mkt.-Electives	3	3
GE II-BUS CORE	Psych 23*-Mgt. 180	Fund. of Psych-Policy & Planning	3	3
GE AREA II	Soc. 21*	Prin. of Sociology		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS-Phil. 133	Electives	3	3
GE FREE	Elective	Elective	3	
			18	18

TOTAL: 133 credits

*Recommended.

MKT. 107 Staff
Managerial Marketing 3 credits
(Prerequisite: Junior standing, Econ. 11, 12) Managerial analysis of the marketing activities in business firms and institutions including issues of macro-environment, consumer behavior and international markets. Emphasis on segmenting target markets and developing marketing policies, such as product introduction, promotional campaigns, channels of distribution and pricing tactics.

MKT. 130 Dr. Apostolidis/Staff
Marketing Research 3 credits
(Prerequisite: MKT. 107) Study of the role of marketing information as the basis for decision making. Topics include research design, methods of gathering data, questionnaire structure, interviewing methods, and preparing the final report. Examples of various types of research problems and quantitative techniques used by marketing management are presented.

MKT. 131 Prof. Lefkowitz/Staff
Marketing Communications 3 credits
(Prerequisite: MKT. 107) Personal and mass communication approaches generated by manufacturers and intermediates or institutions toward target markets. The design of advertising campaigns to shift consumer attitudes, to secure resellers' support and to inform, persuade and move them to action. Development of copy selection of media and measurement of promotion effectiveness including evaluation of sales force.

MKT. 132 Prof. Lefkowitz/Staff
Buyer Behavior 3 credits
(Prerequisite: MKT. 107) Study of theories of consumer behavior. The buyer is analyzed at the individual level in terms of motivation, attitudes, etc. and at the social level in terms of influence on buying behavior from the socio-economic environment.

MKT. 134 Prof. Pachuk/Staff
Sales Force Management 3 credits
(Prerequisite: Mgt. 116, MKT. 107) This course is intended to develop the concepts and techniques needed to identify and analyze the various decision areas faced by a sales force manager. Topics to be covered include recruiting, selecting, and training the sales force; forecasting, budgeting and sales quotas; assigning, motivating and compensating the sales force.

MKT. 135 Prof. Pachuk/Staff
Retailing Management QMS credits
(Prerequisite: MKT. 107, FIN. 110, MGT. 108, QMS 109) This course is intended to focus on the decision area facing retail managers. Topics to be covered will include retailing, structure, merchandising, locations, store layout, promotion, pricing and personnel.

MKT. 167 Dr. Marber/Staff
International Marketing 3 credits
(Prerequisite: MKT 107) A managerial approach to international marketing with emphasis on the key variables, controllable and uncontrollable, by the international marketing executive. A study of the underlying factors which affect international markets. Special emphasis will be given to multinational marketing programs.

QUANTITATIVE MANAGEMENT SYSTEMS

DR. KAKUMANU, *Chairperson*

Production and Operations Management is primarily concerned with the effective use of physical resources in the production of goods and services. Career opportunities include:

Production Planning & Control	Quality Control
Inventory Management	Warehouse Management
Production Scheduling	Maintenance
Material Management	Purchasing

PRODUCTION AND OPERATIONS MANAGEMENT

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		JUNIOR		
MAJOR	QMS 151	Mgt. of Materials, Meth. & Prod.		3
MAJOR	QMS El.	Advanced QMS Elective		3
BUS CORE	Mgt. 108-116	Organiz. & Mgt.-Organ. Behavior	3	3
BUS CORE	QMS 109-115	Intro. Mgt. Sci.-Prod. & Op. Mgt.	3	3
BUS CORE	Mkt. 107-Fin. 110	Mgrl. Mktg.-Corporation Fin.	3	3
GE AREA IV	Humanities	Elective	3	
GE CORE	Eco. 103	Environment Intl. Bus	3	
			15	15
		SENIOR		
MAJOR	QMS 150-182	Adv. Product & Inventory Mgt.-QMS Seminar	3	3
MAJOR	QMS 152-QMS El.	Computer Applications to Mft. Mgt.-Adv. QMS Elective	3	3
GE II-BUS CORE	Psych 23*-Mgt. 180	Fund of Psych-Policy & Planning	3	3
GE AREA II	Soc 21*	Prin. of Sociology		3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS-Phil. 133	Electives	3	3
GE FREE	Elective	Elective	3	
			18	18

TOTAL: 133 credits

*Recommended.

QMS. 15 Dr. D. Gougeon/Staff
Statistics for Business I 3 credits
(Prerequisite: Math 7 or 14) An introduction to the elements of probability theory. The major probability distributions are covered with an emphasis on business applications. Basic concepts in decision theory are also introduced.

QMS. 16 Dr. D. Gougeon/Staff
Statistics for Business II 3 credits
(Prerequisite: QMS 15) A survey of modern statistical methods covering parameter estimation, hypothesis testing, goodness of fit tests, analysis of variance, regression analysis, index numbers and time series analysis.

QMS. 109 Staff
Introduction to Management Science 3 credits
(Prerequisite: Junior standing, CMPS 21, QMS 16) A survey of the quantitative techniques which are used by modern managers. Topic coverage focuses on model building, linear programming methods, and simulation. Emphasis is placed on the use and limits of these quantitative methods.

QMS. 115 Staff
Production and Operations Management 3 credits
(Prerequisite: QMS 109, CMPS 21, Junior Standing) An introductory course designed to give the student a functional view of how to manage the activities involved in the process of converting or transforming resources into products or services. Topics covered include an overview of strategic decisions, forecasting, product design, process planning, facility layout, project management, basic inventory models, capacity planning, aggregate planning and scheduling.

QMS. 150 Dr. Nathan/Staff
Advanced Production and Inventory Management 3 credits
(Prerequisite: QMS 115) Production planning and inventory management within the organization. Topics covered include capacity planning, master production, scheduling, material requirements planning, reorder point and periodic review inventory models with Probabilistic demand, and problems of practical applications.

QMS. 151 Dr. Nathan/Staff
Management of Materials, Methods and Productivity 3 credits
(Prerequisite: QMS 16, Mgt. 108) A concentrated study of activities associated with materials and their flow within the organization, with emphasis on productivity improvement. Purchasing, materials handling, facility layout, work measurement, shop flow management, maintenance, and quality management.

QMS. 152 Dr. Kakumanu/Staff
Computer Applications to Manufacturing Management 3 credits
(Prerequisite: QMS 115) The use of computer software in production and operations. Topics are selected from material requirements, planning systems, CAD/CAM and computer integrated manufacturing, project planning and scheduling systems, computerized relative allocation of facilities, computerized method for sequencing operations for assembly lines, and any new systems related to production and operations management.

QMS. 153 Dr. Kakumanu/Staff
Business Information Management 3 credits
(Prerequisite: CMPS 21, Mgt 108) Computers and how they can be applied to the operations and management of business firms. The topics include data processing concepts, overviews of computer hardware and software, modern data and information processing systems, applications of computers in business, acquiring and managing of computer and information resources.

QMS 157 Dr. Cunningham/Staff
Logistics Management 3 credits
(Prerequisite: QMS 115) The design, operation and control of logistics systems for production and service firms. Topic coverage includes those activities associated with the firm. Sample topics include facilities, location, logistics of customer service, order processing systems, mode and carrier selection, warehousing, and logistics requirements planning.

The College of Health, Education, and Human Resources

Dr. John Gay, Dean

The College of Health, Education, and Human Resources is the University's newest academic division. Comprising four departments which already enjoyed traditions of excellence, the College was established in 1987 in response to the unique needs of students preparing to enter directly into a variety of professional fields. All of this College's programs give students internship experience and lead to appropriate professional certification.

EDUCATION

DR. CUNNINGHAM, *Chairperson*
PROF. CURTIS, *Director of Student Teaching*

Through its various programs, the Department of Education endeavors to contribute to the improvement of education by preparing informed, inquiring, and skilled professionals for positions in the educational community. More specifically, the Department aims to provide persons with a breadth and depth of knowledge and understanding in their specialized area of professional practice and to provide training to insure competence in the specific area of functioning. To this end, individual program competencies have been developed. Additionally the Department endeavors to offer opportunities for continued professional growth to practicing educators, to assist in the educational growth and development of the community served by the University, and to foster the advancement of knowledge through research in education.

The Department of Education offers teacher education concentrations leading to secondary certification in:

Biology	General Science	Physics
Chemistry	German	Communications
Latin	Social Studies	English
Mathematics	Spanish	French

The Department also offers a Bachelor of Science in Elementary Education leading to certification in this area.

The education program is accredited by the Pennsylvania Department of Education and the National Council for Accreditation of Teacher Education. These accreditations and reciprocity agreements between Pennsylvania and selected states assure that courses taken will be considered for certification in most states. Competency tests will be required for Pennsylvania Teacher Certification after June 1, 1987.

Students will be accepted for teacher education only with the approval of the Department of Education. Pre-entrance interviews may be required.

A student may enter the education program either as a major in education or in his/her subject area. However, in both cases the student must be approved by the Department and follow the prescribed courses if he/she desires certification. Specific requirements for each subject matter concentration are available from the Education Department. Students will be given a curriculum guide upon approval of their entrance into the program.

Double majors between a subject area and education may be arranged in the case of exceptional students. These must be approved by both departments involved and by the dean. A specific program will be designed in each individual case. Double certification programs may also be arranged to improve the student's employment potential.

The Requirements and Curriculum Guide provides the rules and regulations which must be followed to remain a candidate for certification and graduation.

EDUC. 3 Prof. J.C. Williams
Reading-Research 3 credits
This course is designed to increase a student's proficiency in reading. The following skill areas will be covered: comprehension, rate, vocabulary, critical analysis, research, and study skills. The lecture and laboratory approaches are utilized with the emphasis on individualized instruction using multi-level materials. (GE Area III)

EDUC. 21 Staff
The Foundations of Education 3 credits
The characteristics of the public school system in the United States, the role of education in contemporary society, and current issues related to education are presented. (GE Area II)

EDUC. 22 Staff
Educational Psychology 3 credits
The psychological basis of teaching strategies, classroom environment, learning, motivation, reinforcement, and evaluation will be taught. (GE Area II)

EDUC. 23 Staff
Sophomore Field Experience 1 credit
(Prerequisite: Education 22) This experience will be closely associated with Education 21 and 22. Projects will be assigned to be carried out in the secondary schools through observation and contact.

SECONDARY EDUCATION

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FRESHMAN		
MAJOR	Teaching Major	Introductory Courses	3	3
COGNATE	Educ. 21	Foundations of Education		3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA II	Psych. 23-Elec.	Fundamentals of Psych.*-Psych. Elec.*	3	3
GE AREA III	Communications	Electives	3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	Teaching Major	Required or Elective Courses	6	6
COGNATE	Educ. 22-23	Educational Psych.-Soph. Experience	3	1
GE AREA I	Nat. Sci./Quant.	Electives	3	3
GE AREA II	Soc. 21-22	Basic Sociology-Social Problems*	3	3
GE AREA V	T/RS 22	Theology II		3
PHYS EDUC	Ph.Ed.	Physical Education	1	1
			16	17
		JUNIOR		
MAJOR	Teaching Major	Required or Elective Courses	6	6
COGNATE	Educ. 103-104	General Method & Planning—Subject Method	3	3
COGNATE	Educ. 24-107	Junior Experience—Reading in Secondary School	1	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 110	Ethics	3	
GE AREA V	Educ. 106	Philosophy of Education*		3
GE FREE		Elective	3	
			19	18
		SENIOR		
MAJOR	Teaching Major	Electives		6
COGNATE	Educ. 113	Classroom Management	2	
COGNATE	Educ. 115	Planning in Student Teaching	2	
COGNATE	Educ. 116	Instruction in Student Teaching	2	
COGNATE	Educ. 117	Managing Classrooms in Student Teaching	3	
COGNATE	EDUC. 118	Professional Growth	3	
GE AREA III	Communications	Elective		3
GE AREA V	Phil.-T/RS	Philosophy or Theology Elective		3
GE FREE	Electives	Electives		6
			12	18
			TOTAL: 132 credits	

*Departmental recommendations
Comm. 2 and English 7 are recommended
N.B. Students in the teaching areas of math and science will take humanities (GE AREA IV) courses in place of Natural Science/Quantitative (AREA I) courses where noted above.

ELEMENTARY EDUCATION

	Dept. and No.	Descriptive Title of Course	Credits FALL	Credits SPRING
		FRESHMAN		
MAJOR	Educ. 21	Foundations of Education		3
COGNATE	Nurs. 10	Family Health		3
G.E. AREA I	Math 1	Math Discovery	3	
G.E. AREA II	Psych. 23-144	Fundamentals - Childhood Adol.	3	3
G.E. AREA III	Eng 7-Comm. 2	Composition-Fund. of Speech	3	3
G.E. AREA III	Cmps 1	Computer Literacy	3	
G.E. AREA V	Phil 20/T/RS 21	Intro. to Phil. - Theology I	3	3
Phys. Ed.	Phys. Ed.	Phys. Ed.	1	1
			16	16
		SOPHOMORE		
MAJOR	Educ. 22-23	Ed. Psy. - Soph. Exp.	3	1
COGNATE	Chem. 3- Geog. Elect.	Cultural Chem-Geog.	3	3
COGNATE	Eng. 127	Teaching Modern Grammar		3
G.E. AREA I	Bio. 3/ Phys. 4	Gen. Bio. - Earth Science	3	3
G.E. AREA II	Soc. 104/ P.S. 105	Anthropology - State Government	3	3
G.E. AREA V	T/RS 22/ Phil. 110	Theology II - Ethics	3	3
Phys. Ed.	Phys. Ed.	Phys. Ed.	1	1
			16	17
		JUNIOR		
MAJOR	Educ. 24-119	Jr. Field - Sub. Methods I	1	3
MAJOR	Educ. 103	Gen. Methods and Planning	3	
MAJOR	Educ. 191-107	Found. of Reading - Reading in Content	3	3
COGNATE	Eng. 125	Teaching Written Communication		3
COGNATE	Elect.	Elect.	3	3
GE FREE	Elect.	Elect.	3	
G.E. AREA IV	Hist. 1 or 2	American History	3	
G.E. AREA IV	Eng. 177 or 383	Children's Literature		3
G.E. AREA V	Ed/P 106- Elect.	Philosophy of Education - Elect.	3	3
			19	18
		SENIOR		
MAJOR	Educ. 120	Subject Methods II	3	
COGNATE	H/HS 103	Group Dynamics	3	
COGNATE	Elect.	Elect.	3	
COGNATE	Elect.	Elect.	3	
G.E. AREA II	Econ. 101	Essentials of Economic Theory	3	
G.E. AREA IV	Art 115	Modern Art History	3	
MAJOR	Educ. 113	Classroom Management		2
MAJOR	Educ. 115	Planning in Student Teaching		2
	Educ. 116	Instruction in Student Teaching		2
	Educ. 117	Managing Classrooms in Student Teaching		3
	Educ. 118	Professional Growth		3
			18	12

TOTAL: 132 credits

EDUC. 24 Staff
Junior Field Experience 1 credit
Close association with the Education 103 and 104 courses will be maintained with an emphasis on studying teaching techniques and with involvement in teacher activities in area secondary and/or elementary schools.

EDUC. 103 Prof. Curtis
General Methods and Planning 3 credits
(Prerequisite: Education 22) Methodology for setting direction in the classroom, creating a learning situation, developing the content, reinforcing and evaluating will be covered. Students will be involved with developing plans for teaching. (GE Area III)

EDUC. 104 Staff
Specific Subject Methods 3 credits
(Prerequisite: Education 103) Utilizing knowledge of planning and teaching generally, students will be guided in the analysis of specific content and techniques for teaching that content. They will demonstrate their ability to carry out plans in "micro" teaching experiences. (GE Area III)

EDUC. 106 Staff
Philosophy of Education 3 credits
An examination of representative modern systemic philosophies of education with a critical analysis of the answers that each system of philosophy provides to the important questions concerning the nature of knowledge, value, man and society. (Recommended as GE Area V elective for education majors)

EDUC. 107 Prof. Williams
Reading in the Secondary School 3 credits
This course is the study of the reading process with emphasis placed on understandings and skills needed by secondary school students in their subject fields.

EDUC. 108 Prof. Cannon
Early Childhood Education 3 credits
The purpose of this course is to give students an introductory overview of the theory, research and practice of early childhood education. Consideration will be given to the educational process from the fetal stages on through the first three years of life as well as the early years of schooling.

EDUC. 110 Prof. Curtis
Values Development 3 credits
A course designed to acquaint the student with theories relating to value development: what values are, and how they are formed. The affective process, value systems, activities for value development suitable for use by parents, teachers and others involved in human relations will be covered. The emphasis will be on the adolescent. Open to all majors. (GE Area II)

EDUC. 113 Staff
Classroom Management and Discipline 2 credits
In-depth study of the rationale, theories, and techniques for creating a situation where learning can take place and for handling specific individual and group behavior problems in productive ways. (GE Area II)

EDUC. 115 Staff
Planning in Student Teaching 2 credits
Preparation of actual teaching plans during student teaching.

EDUC. 116 Staff
Instruction in Student Teaching 3 credits
Involvement in implementing methods and techniques. Actual teaching on a full time basis under the supervision of classroom teachers and University supervisors.

EDUC. 117 Staff
Managing Classrooms in Student Teaching 2 credits
Involvement in management of the Learning situation during student learning.

EDUC. 118 Staff
Professional Growth 3 credits
The demonstration of professional growth during student teaching as evidenced by professional behavior and skills, evidence of growth and a commitment to improvement and ability to relate to others. This will include attendance and participation in a weekly seminar to analyze and discuss professional considerations and student teaching problems.

EDUC. 119 Staff
Subject Methods I Science/Mathematics 3 credits
The course Subject Methods I is designed to provide the elementary education major with planning and instructional strategies appropriate for use in science and mathematics. An analysis of content will be made in light of the curricular needs of the elementary school, the elementary child and society.

EDUC. 120 Staff
Subject Methods II Language Arts/Social Science 3 credits
The course Subject Methods II is designed to provide the elementary education major with planning and instructional strategies appropriate for use in the language arts and social sciences.

EDUC. 190 Staff
Special Topics in Education 1-3 credits
A series of courses dealing with specific educational issues, theories, ideologies, skills, methods, or other designated topics for individual or group study. Course is offered on student demand. (GE Area dependent on topic)

HUMAN RESOURCES

DR. SZUHAY, *Chairperson*

The Health and Human Services curriculum of the Human Resources Department is designed to develop in students the values, knowledge and skills necessary to work with people in a variety of helping relationships. The sequence of courses includes significant integration with the fields of psychology and sociology. As such, the curriculum is interdisciplinary and allows the student maximum freedom in exploring related academic fields. The program is geared to students who have high social science interests as well as general scientific interest and aptitudes in the social and behavioral sciences. The curriculum is career oriented; this aids the graduate in securing entry-level positions with the public and private agencies in programs concerned with prevention and remedial health, welfare and rehabilitation services. The curriculum also provides a solid foundation for future graduate level education in the helping professions, particularly in rehabilitation counseling, school counseling, social work, and psychology. The Department also administers Master's Degree programs in Rehabilitation Counseling, Individual and Group Counseling, Human Resources Administration and Health Administration.

HEALTH AND HUMAN SERVICES

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	H/HS 11	Foundations of Human Services	3	
MAJOR	H/HS 12	Human Services Systems		3
COGNATE	Psych. 23	Fundamentals of Psychology	3	
COGNATE	Elective	Elective		3
GE AREA III	Communications*	Electives*	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 20-T/RS 21	Intro to Phil.-Theology I	3	3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	H/HS Elective	Elective	3	
MAJOR	H/HS 115-116	Health & Medical Information I-II	3	3
COGNATE	Soc. 21-Elective	Principles of Sociology-Elective	3	3
GE AREA I	Psych 24*-Elective	Statistics-Elective	3	3
GE AREA III	CMPS 21*	Computing for Business & Social Sciences		3
GE AREA IV	Humanities	Elective		3
GE AREA V	T/RS 22-Phil. 110	Theology II-Ethics	3	3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	19
		JUNIOR		
MAJOR	H/HS 13	Career Planning & Development	3	
MAJOR	H/HS 101-102	Interviewing-Counseling Theories	3	3
MAJOR	Psych. 144 or 155	Childhood & Early Adoles. or Late Adoles., Adulthood & Aging		3
COGNATE	Psych 145*	Abnormal Psychology		3
GE AREA I	Nat. Sci./Quant.	Elective	3	
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil.-T/RS	Elective		3
GE FREE	Elective	Elective	3	
			15	15
		SENIOR		
MAJOR	H/HS 103	Group Dynamics	3	
MAJOR	H/HS 199	Internship		3
MAJOR	H/HS 104	Seminar: Interventions	3	
COGNATE	Electives	Electives	3	6
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil.-T/RS	Elective	3	
GE FREE	Electives	Electives	3	3
			15	15

TOTAL: 127 credits

*Specific Departmental Recommendations. Unless proficiency is otherwise demonstrated, Engl. 7 and Comm. 2 must be included among G.E. Area III electives.

MINOR. A minor in Health and Human Services requires H/HS 11, 12, 101, 102, 103 and 116.

HEALTH ADMINISTRATION

The Health Administration curriculum is designed to develop in students the values, knowledge, and skills necessary to enter the growing field of health administration. The sequence of courses includes a significant integration of the fields of health and business administration as well as the opportunity to develop minors in health and human services, gerontology, public administration, and business. As such, the curriculum is interdisciplinary and provides the student with a broad base of knowledge for securing entry-level positions with public and private agencies in positions concerned with the administration of preventive and remedial health, welfare, and rehabilitative services. The curriculum also provides a solid foundation for future graduate level education in various administrative disciplines such as human resources administration, public health, health and hospital administration, health planning, public administration, and business administration.

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
MAJOR	HADM 111	Introduction to Health Administration	3	
MAJOR	HADM 112	Health Systems		3
COGNATE	Elective	Elective	3	3
GE AREA 1	Acc. 3-4	Financial Accounting-Managerial Accounting	3	3
GE AREA III	Communications*	Communications*	3	3
GE AREA V	Phil. 20-T/RS 21	Intro. to Philosophy-Theology I	3	3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		SOPHOMORE		
MAJOR	HADM 121**	Marketing Health Care**		3
MAJOR	HADM 122**	Health Administration Law**	3	
COGNATE	Mgt. 9-Econ. 101	Legal Envir. of Bus.-Essentials of Econ. Theory	3	3
GE AREA I	Elective	Elective		3
GE AREA III	CMPS 21	Computing for Business and Social Science	3	
GE AREA IV	Humanities	Elective	3	3
GE AREA V	Phil. 110-T/RS 22	Ethics-Theology II	3	3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			16	16
		JUNIOR		
MAJOR	HADM 11	Career Seminar	1	
MAJOR	HADM 131	Research in Health Administration	3	
MAJOR	HADM 132	Resource Development	3	
MAJOR	HADM 133	Health Economics and Finance		3
COGNATE	Mgt. 108-Mgt. 116	Organization and Management-Organizational Behavior	3	3
COGNATE	Elective-Mkt. 107	Elective-Managerial Marketing	3	3
GE AREA IV	Humanities	Electives	3	3
GE AREA V	Phil. 132#-133#	Medical Ethics#-Business Ethics#	3	3
			19	15
		SENIOR		
MAJOR	HADM 141	Health Administration	3	
MAJOR	HADM 142	Issues in Health Administration	3	
MAJOR	HADM 199	Internship		3
COGNATE	Electives	Electives	3	3
GE AREA IV	Humanities	Electives	3	3
GE FREE	Electives	Electives	3	6
			15	15

TOTAL: 128 credits

*The Department recommends demonstration of communication skills by proficiency examination if possible; failing this, student must complete COMM. 2 and ENGL. 7. #Strongly recommended. **Or HADM 123.

MINORS. A minor in Health Administration requires 18 credits distributed as follows: HADM 112, HADM 131, HADM 133, HADM 141, and any two courses from HADM 121, HADM 122, HADM 123, HADM 199.

HEALTH AND HUMAN SERVICES

H/HS 11 Staff
Foundations of Human Services 3 credits
Designed to increase the student's awareness of his needs, his impact on other persons, and the demands of his environment. The relationship between the professional helper and his clients as the foundation of all human service efforts is emphasized. Group methods will be employed.

H/HS 12 Staff
Human Services Systems 3 credits
Designed to help students to be more responsive to individual, group, community, and societal needs and to understand the organization and structure of human service systems. Concepts of organizing, integrating, and implementing a network of different human services are discussed and visits to community agencies are conducted.

H/HS 13 Staff
Career Planning and Development 3 credits
Designed to explore theories of vocational development, vocational decision-making, career planning, specific occupations, and job hunting.

H/HS 101 Staff
Interviewing 3 credits
The role of the helper as a case manager or coordinator of services is examined. Initial interviewing skills and techniques are discussed. Case studies and role playing activities are utilized.

H/HS 102 Staff
Counseling Theories and Techniques 3 credits
(Prerequisite: H/HS 101) The role of the helper as an individual counselor or caseworker is examined. Theories and techniques as well as problems in individual counseling are explored.

H/HS 103 Staff
Group Dynamics 3 credits
(Prerequisite: H/HS 101 and 102) The role of the helper as a group intervention specialist is examined. Theories and techniques of group counseling, group process, and group dynamics are explored and practiced in controlled settings.

H/HS 104 Staff
Seminar in Human Services Interventions 3 credits
(Prerequisite: H/HS 101 and 102) Students will be exposed to theory and practice associated with such counseling interventions as relaxation, systematic desensitization, assertion training, self-control, imagery, and cognitive restructuring. Readings and presentations of counseling research will be required.

H/HS 111 Staff
Introduction to Recreational Therapy 3 credits
Designed to develop an understanding of purpose, organization, administration and delivery of recreational therapy services for handicapped.

H/HS 115-116 Staff
Health and Medical Information I & II 6 credits
General data on societal health status is presented along with descriptions of the health professions involved in health services delivery. Selected physical conditions and/or disabling conditions are illustrated with particular reference to body systems involved, treatment possibilities, residual functional limitations, and psycho-dynamics of each condition. (H/HS 115 is prerequisite for H/HS 116.)

H/HS 117 Staff
Addictive Behavior 3 credits
Physical, social and psychological aspects of addiction: biochemical, nutritional, psychodynamic, and behavioral approaches to assessment, treatment, and prevention of addiction. Drug abuse, alcoholism, smoking, obesity.

H/HS 118 Staff
Health and Behavior 3 credits
Focuses on stress which affects thoughts, emotions, and the body. Stress diseases of adaption include cancer, Type A Behavior, GI tract disorders along with stress-related thought disorders and emotional disturbances. Students learn to apply relaxation training, cognitive restructuring, and record keeping in the treatment of their own as well as others' health.

H/HS 121** Staff
Organization & Administration of Hospitals 3 credits
The role and responsibilities of hospitals, relationships with other components of the health system and an analysis of the process of hospital administration.

H/HS 122** Staff
Organization and Delivery of Health Care Services 3 credits
An overview of the nature and organization of health care services in the United States is presented. The factors affecting the delivery of such services are identified to provide an understanding of the evolution and dynamics of the health care system as well as prospects for future development.

H/HS 133** Staff
Grantsmanship 3 credits
Proposal writing for program planning and/or soliciting funds from public and private sources is discussed. Included are concepts of needs assessment, programming strategy, program evaluation, and budgetary considerations. Sources of funding are presented as well as funding resources materials.

H/HS 198** Staff
Internship in Health and Human Services Administration 3-6 credits
Supervised practical experience in a community agency or facility in the administrative-related areas as well as on-campus seminars.

H/HS 199 Staff
Internship in Human Services 3-6 credits
Supervised practical experience in a community agency providing human services. In selected case a student may receive credit for part-time paid work experience.

**These courses offered through Spring, 1989; thereafter refer to the B.S. in Health Administration curriculum.

HEALTH ADMINISTRATION

HADM 11 Staff
Career Seminar 1 credit
(Majors only) Seminar in which students appraise their present status and develop specific written educational and career plans for future coursework, career entry, and/or graduate school.

HADM 111 Staff
Introduction to Health Administration 3 credits
(Team taught by faculty and open to HADM majors only) An initial overview of health care in the United States and the professions involved. Emphasis is placed on the values of health care providers and administrators.

HADM 112 Staff
Health Systems 3 credits
The nature and organization of health care in the United States. Factors affecting the delivery of such services are identified to provide an understanding of the evolution and dynamics of the health care systems as well as prospects for future development.

HADM 121 Staff
Marketing Health Care 3 credits
The development of health care services and their distribution is related to strategic planning, public relations, and the development of marketing plans.

HADM 122 Staff
Health Administration Law 3 credits
The legal and regulatory environment of health care and the administration of health services.

HADM 123 Staff
Supervising Health Professionals 3 credits
Principles and practices of direct supervision of personnel including motivation, leadership, and various personnel functions.

HADM 131 Staff
Research in Health Administration 3 credits
(Majors only) Principles and processes of research in health administration including literature review, research design, data collection techniques, statistical analysis, and professional writing in generating new knowledge and in using research in administration.

HADM 132 Staff
Resource Development 3 credits
Proposal writing for program planning and/or soliciting funds from public and private sources as well as the role of public relations and development in the creation of organizational resources.

HADM 133 Staff
Health Economics and Finance 3 credits
(Prerequisite: Acc. 3 and 4) The costs of health care in society with emphasis on financial concepts and reimbursement mechanisms for health providers.

HADM 141 Staff
Health Administration 3 credits
Role and functions of the supervisory and administrative structure, including Boards of Directors, in health agencies, systems, and organizations.

HADM 142 Staff
Issues in Health Administration 3 credits
(Senior level, team taught, majors only) Issues in health care administration are selected by students for in-depth analysis, study, and discussion.

HADM 196 Staff
Special Topics 3 credits
Selected topics of current interest in health administration are offered on a variable basis including administering long-term care facilities, group behavior in organizations, health promotion, etc.

HADM 199 Staff
Internship 3 credits
(Prerequisites: 18 HADM credits or approval of Program Director) 150 clock hours of supervised practical experience in a community agency or organization in a staff or administrative-related capacity with on-campus seminars. A semester project may be required. Available for two experiences for a total of six credits.

NURSING

DR. BAILEY, *Chairperson*

The purpose of the Baccalaureate nursing program is the preparation of qualified persons for entry-level practice of professional nursing in hospitals and community health settings. The program also provides the academic foundations for advanced study in nursing.

High school graduates are admitted as freshmen into the program which leads to a Bachelor of Science degree with a major in nursing. Total class enrollment is limited in consideration of educational and clinical resources. The curriculum can be completed in eight regular semesters of full-time study or four academic years. Students are encouraged to enroll in general education courses during January intersession and summer sessions to reduce the fall and spring term schedules. Transfer students will be considered on a space available basis.

The nursing curriculum is approved by the Pennsylvania State Board of Nurse Examiners. The curriculum is based on a planned progression of courses so arranged as to build upon and develop knowledge and skills at levels of increasing competency. Therefore, all required courses must be taken in sequence.

For progression through the nursing program, a minimum grade of C must be attained in the prerequisite natural science courses (Biology 13-14, Chemistry 13-14, Biology 125, Mathematics 44) and in each nursing course.

Prior to the junior and senior year, students enrolled in the nursing program must present a certificate as evidence of having completed the Cardiopulmonary Resuscitation Basic Life Support course or Modular course offered by the American Red Cross or the American Heart Association.

In addition to the general University tuition and fees listed in the Student Expenses section, students majoring in nursing assume the responsibility for the following: uniforms and other required clinical accessories, yearly physical examinations, biennial eye and dental examinations, immunizations, comprehensive/achievement tests, liability insurance and any travel expenses incurred. Students must also provide their own transportation to and from agencies utilized for clinical laboratories, and have access to a car during their Community Health laboratory in the senior year.

Applicants and students should be aware that Pennsylvania Law prohibits licensure of individuals convicted of felonies related to controlled substance and may prohibit licensure if there is a conviction for any felonious act. For details, see the Admissions Brochure and the Student Handbook of the Department of Nursing.

Upon graduation the students will be eligible for admission to examination for the registered nurse licensure. The department of Nursing is accredited by the National League for Nursing.

NURS. 10 Staff
Family Health 3 credits
(For non-nursing majors.) Concepts and principles related to the promotion and maintenance of optimal family health. Considers factors pertinent to health needs and health practices throughout the life cycle. (GE AREA I).

NURS. 11 Staff
Fundamentals of Health Care 2 credits
(For Physical Therapy majors only.) Introduction to selected principles and techniques of health care such as assessment of vital signs, asepsis, that are basic to safe client care and applicable to the practice of physical therapy. 1 hour lecture. 2 hours laboratory.

NURS. 12 Staff
Introduction to Nursing Concepts 3 credits
(Prerequisite: Sophomore status in Nursing Program) An exploration of the core concepts of the client, health, nursing and health patterns. Historical, philosophical and social development of nursing and the role of the professional nurse presented. Understanding of health and health continuum in the broader perspective of the human person, the physiological, psychological, developmental, and sociocultural modes. Introduction of the nursing process as it relates to the development of cognitive, interpersonal, and psychomotor skills to assist clients to attain and maintain an optimal level of health. 3 hours lecture.

NURS. 13 Staff
Perspectives in 2 credits
Professional Nursing
(Prerequisite: Sophomore status in the Nursing Program. For Registered Nurse students only.) Explores concepts incorporated in the philosophy, organizing framework and curriculum structures of the nursing program. Integration of the health patterns and nursing process in the delivery of professional nursing care is introduced. Pertinent issues impacting on the nursing profession are addressed.

NURS. 14 Prof. Narsavage
Nursing I 6 credits
Nursing Related to Health Patterns
(Prerequisite: Sophomore status in the nursing program) Development of beginning psychomotor and assessment skills necessary for the promotion of optimal health as a care-giver. Focus on the professional nurse's role in assessing and diagnosing the developmental, physiological, psychological, and sociocultural dimensions of adaptive health patterns in individuals with a stable health status. 4 hours lecture and 6 hours laboratory.

NURSING

	Dept. and No.	Descriptive Title of Course	Credits FALL	SPRING
		FRESHMAN		
COGNATE	Chem. 13-14	Introductory Chemistry	4	4
COGNATE	Biol. 13-14	Structure & Function of the Human Body	4	4
GE AREA II	Psych. 23	Fundamentals of Psychology*		3
GE AREA IV	Humanities	Electives	6	3
GE AREA V	Phil. 20	Introduction to Philosophy	3	
GE AREA V	T/RS 21	Theology I		3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			18	18
		SOPHOMORE		
MAJOR	Nurs. 12†	Foundations of Professional Nursing	3	
MAJOR	Nurs. 14†	Nursing I		6
COGNATE	Biol. 125	Intro. Medical Microbiology	3	
COGNATE	Math 44	Computional Statistics		3
GE AREA II	Soc. 127	Medical Sociology*	3	
GE AREA II	Psych. 26	Theories of Personality*	3	
GE AREA III	Communications	Electives	3	3
GE AREA IV	Humanities	Elective		3
GE AREA V	Phil. 110-132	Ethics—Medical Ethics*	3	3
PHYS EDUC	Ph. Ed.	Physical Education	1	1
			19	19
		JUNIOR		
MAJOR	Nurs. 101-102	Clinical Pathology I-II	3	3
MAJOR	Nurs. 103	Nursing II	9	
MAJOR	Nurs. 104	Nursing III		9
GE AREA IV	Humanities	Electives	3	3
GE AREA V	T/RS 22	Theology II	3	
			18	15
		SENIOR		
MAJOR	Nurs. 121	Nursing IV	9	
MAJOR	Nurs. 123	Research in Nursing	3	
MAJOR	Nurs. 124	Nursing V		9
GE AREA V	T/RS-Phil.	Elective		3
GE FREE	Electives	Electives	3	3
			15	15

TOTAL: 137 credits

*Departmental Recommendation
†NURS. 13 and NURS. 15 are to be substituted by R.N. students only.

NURS. 15 Staff
Nursing Related to the Assessment of Health Patterns 4 credits
(Prerequisite: Sophomore status in the Nursing program. For Registered Nurse students only) Focus on the professional nurse's role as care-giver in assessing and diagnosing the dimensions of adaptive health patterns of individuals with a stable health status.

NURS. 101 Staff
Clinical Pathology Related to Health Patterns I 3 credits
(Prerequisites: Chemistry 13-14, Biology 13-14, Biology 125) Physical and psychosocial adaptations in response to illness in clients. Concepts dealing with self perception-self concept, sleep-rest, and activity-exercise health patterns are explored and related to specific alterations in clients' health status; relationship of nutrition and pharmacology to pathophysiology and psychopathology. 3 hours lecture.

NURS. 102 Staff
Clinical Pathology Related to Health Patterns II 3 credits
(Prerequisite: Clinical Pathology 101) Physical and psychosocial adaptations in response to illness in clients. Concepts dealing with nutrition metabolic, sexuality-reproductive, role-relationship, elimination, and cognitive-perceptual health patterns are explored and related to specific alterations in clients' health status; relationship of nutrition and pharmacology to pathophysiology and psychopathology. 3 hours lecture.

NURS. 103 Prof. Harrington
Nursing II Prof. Scheck
Nursing the Individual 9 credits
(Prerequisites: Nursing 12, Nursing 14, Corequisite: Nursing 101) Focus on the professional nurse's role as care-giver, advocate and teacher in restoring the physiological and psychosocial adaptive responses of the individual experiencing alternations in the health patterns of self perception-self concept, sleep-rest and activity-exercise. Emphasis placed on the planning and implementation of the nursing process in meeting health needs. 4 hours lecture and 15 hours laboratory.

NURS. 104 Prof. Bohlen
Nursing III Prof. Rinaldi
Nursing the Individual/Family 9 credits
(Prerequisite: Nursing 103; Corequisite: Nursing 102). Focus on the professional nurse's role as caregiver, advocate and teacher in restoring adaptive responses of the individual and family experiencing alternations in health patterns of sexuality-reproductive, nutrition-metabolic, role-relationships. Emphasis placed on the planning and implementation phases of the nursing process in meeting health needs. 4 hours lecture and 15 hours laboratory.

NURS. 121 Prof. Weller, Prof. Matesi
Nursing IV 9 credits
Nursing the Individual/Family/Community
(Prerequisite: Nursing 104) Focus on the professional nurse's role as care-giver, advocate and teacher in promoting and restoring adaptive responses of the individual, family and community experiencing alternations in the health patterns of elimination, cognitive-preceptional, coping-stress-tolerance and value-belief. Emphasis placed on the planning and implementation phases of the nursing process in meeting health needs. 4 hours lecture and 15 hours laboratory.

NURS. 123 Dr. Bailey
Research in Nursing 3 credits
(Prerequisite: Senior status in the nursing program, Math 44). Introduction to and application of the principles and process of research in professional nursing practice. Study of research design, data collection technique, interpretation and critique of nursing research literature and reports and the development of the ability to become a discriminating consumer of nursing research. 3 hours lecture.

NURS. 124 Dr. Bailey
Nursing V Prof. Desmond
Synthesis of Nursing Concepts 9 credits
(Prerequisite: Nursing 121) Focus on the professional nurse's role as leader/manager in promoting, restoring and maintaining adaptive responses in individuals experiencing complex alternations in health patterns. Continued use of the nursing process to implement and to evaluate nursing care of the individual, family, community and groups in collaboration with the nursing and interdisciplinary health teams. 2 hours lecture and 21 hours laboratory.

NURS. 140 Dr. Bailey
Understanding Transcultural Health Care 3 credits
(Prerequisite: Completion of Sophomore year-not limited to nursing majors). This course will focus on exploring values, beliefs and lifestyles of diverse cultural groups in order to expose the student to multicultural concepts of health promotion and maintenance. (GE Free; open to all majors in the Health Care Field).

NURS. 142 Prof. Narsavage
Computer Applications in Nursing 3 credits
(Prerequisite: Junior status in Nursing Program or RN). Designed for nursing majors who wish to learn computer capabilities for nursing applications in ways that do not involve programming. Emphasis is on interactive computer experience as an introduction to disk-operating systems, and word processing, computer-assisted instruction, file management, database management system, care-planning, software evaluation and research access. (GE Free).

NURS. 150 Prof. Scheck
Nursing the Older Adult 3 credits
(Prerequisite: Junior status in nursing program) Focus on the Professional nurse's role of caregiver, advocate and teacher in promoting and maintaining adaptive responses of the older adult experiencing alterations in health patterns. Emphasis placed on multidimensional assessment factors and interventions in meeting bio-psycho-social needs. (GE Free).

Dr. Patricia Bailey, Chairperson

PHYSICAL THERAPY

DR. BARNES, *Chairperson*

The department offers an educational program leading to the Bachelor of Science degree in Physical Therapy which blends professional studies with a broad general education. The curriculum is designed to prepare students for entry-level practice with a foundation of knowledge, ideals and values for productive participation in the profession of physical therapy.

The program is accredited by the American Physical Therapy Association and graduates are eligible for admission to licensure examinations required for practice in the United States.

Admission to a prerequisite two years of pre-professional studies is competitive and normally restricted to the freshman class. Total class enrollment is limited in consideration of clinical resources.

The program's professional phase begins in the junior year. It includes both academic and clinical components arranged sequentially for the progressive development of competencies needed for patient evaluation, treatment planning and implementation, clinical problem-solving, interpersonal communication, and administration of physical therapy services. Experience in direct patient care is provided with active physical therapy services located in affiliated health care institutions and agencies.

Advancement to professional studies is automatic for pre-professional students who satisfy the following criteria: completion of all specified pre-professional prerequisite and general education requirements; attainment of a minimum grade of C in all natural science and department courses specified by the pre-professional curriculum; attainment of an overall C+ average; documentation of a minimum two-weeks experience with an active physical therapy service and positive recommendation from the service's ranking physical therapist, and positive evaluation of personal abilities and aptitudes by faculty responsible for department courses included in the pre-professional curriculum.

Completion of general education courses during January Intersessions will be necessary to reduce fall and spring term schedules. All MAJOR courses must be taken in prescribed sequence. All professional students will be required to complete clinical field experiences and internships specified. Related costs of liability insurance, uniforms, travel, meals, and temporary housing are the responsibility of individual students.

PT 100 Staff
Health and Health Care Systems 2 credits
Introduction to basic terminology and concepts relevant to the health care professions. Elements of a comprehensive health care system are reviewed with emphasis on factors and issues which influence development of system characteristics, and delivery of health care services in the United States.

PT 101 Prof. Pellino
Introduction to Physical Therapy 3 credits
Overview of historical development, philosophic and legal foundations, and contemporary practice of Physical Therapy in the United States. Current practice sites and settings are reviewed with consideration of traditional and emerging roles and responsibilities of the physical therapist. Introduction to treatment cycle and basic patient management techniques. Pre-professional physical therapy students only. 2 hours lecture, 2 hours lab.

PT 102 Profs. Nardone, Kosmahl
Physical Therapy Procedures I 3 credits
Introduction to physical therapy procedures. Problem-oriented patient evaluation and treatment planning is emphasized through coordinated classroom and clinical case-study approach. Lectures and laboratory practice is selected evaluation techniques and therapeutic procedures. Evaluation of the musculoskeletal system, appropriate utilization of thermotherapy and massage are considered. Majors only. 1½ hours lecture. 3 hours lab.

PT 103 Profs. Nardone, Kosmahl
Physical Therapy Procedures II 3 credits
Lectures and laboratory practice in selected evaluation techniques and therapeutic procedures. Management of cardiac and pulmonary dysfunction is considered. The clinical use of electrotherapy as a therapeutic intervention and an evaluative tool is presented. Majors only. 2 hours lecture, 2 hours lab.

PT 104 Dr. Barnes
Therapeutic Exercise I 3 credits
Integrated overview of physiologic and theoretical bases for therapeutic exercise. Musculoskeletal, neuromuscular, cardiovascular, and pulmonary responses to exercise are investigated. Traditional forms of therapeutic exercise and physiologic rationales for their use in the practice of physical therapy are presented. Majors only. 2 hours lecture, 2 hours lab.

PT 105 Dr. Mattingly
Human Anatomy for Physical Therapy 5 credits
In-depth study of gross human anatomy emphasizing structural and functional relationships of skeletal, muscular, circulatory, and nervous structures comprising the head, neck, trunk and extremities. Organic systems relevant to physical therapy practice are also examined. Human dissections are included. Majors only. 3 hours lecture, 4 hours lab.

PHYSICAL THERAPY

	Dept. and No.	Descriptive Title of Course	Credits FALL	INT.	SPRING
		FRESHMAN			
MAJOR	PT 100	Health & Health Care Systems	2		
COGNATE	Chem. 13-14	Introductory Chemistry	4		4
COGNATE	Biol. 13-14	Structure/Function Human Body	4		4
COGNATE	Math 13	Pre-calculus Mathematics		4	
GE AREA II	Psych. 23*	Intro. to Psychology*			3
GE AREA III	Communications	Elective**	3		
GE AREA IV	Humanities	Humanities Elective		3	3
GE AREA V	Phil. 20	Introduction to Philosophy	3		
GE AREA V	T/RS 21	Theology I			3
			16	7	17
		SOPHOMORE			
MAJOR	PT 101	Introduction to Physical Therapy			3
MAJOR	PT 105	Anatomy for Physical Therapy			5
COGNATE	Physics 9-10	General Physics I-II	4		4
COGNATE	Biol. 120	General Physiology	4½		
COGNATE	Nursing 11	Fundamentals of Health Care	2		
GE AREA II	H/HS 11	Foundations of Human Services†			3
GE AREA III	Communications	Elective**		3	
GE AREA IV	Humanities	Humanities Electives	6		3
GE AREA V	Phil. 110	Ethics		3	
GE AREA V	T/RS 22	Theology II	3		
			19½	6	18
		JUNIOR			
MAJOR	PT 102-103	Physical Therapy Procedures I-II	3		3
MAJOR	PT 104-106	Therapeutic Exercise I-II	3		3
MAJOR	PT 108	Neuroscience	5		
MAJOR	PT 109	Field Experience I		1.5	
MAJOR	PT 110	Medical/Surgical Lectures I			2
MAJOR	PT 115	Introduction to Clinical Research			3
MAJOR	PT 120	Concepts in Pathology	2		
MAJOR	PT 121	Kinesiology and Pathokinesiology	4		
MAJOR	PT 123	Developmental Pediatrics			2
GE AREA V	Phil. 132	Medical Ethics††			3
			17	1.5	16
SUMMER	PT 112	Field Experience II 2 crds. (5 wks. @ 40 hrs. a week)			
		SENIOR			
MAJOR	PT 111	Medical/Surgical Lectures II	2		
MAJOR	PT 113	Administrative Seminar	1		
MAJOR	PT 114	Rehabilitation	5		
MAJOR	PT 117	Scientific Inquiry	2		
MAJOR	PT 122	Therapeutic Exercise III	5		
MAJOR	PT 199	Clinical Internships			8
GE AREA IV	Humanities	Humanities Elective		3	
GE AREA V	T/RS Phil.	Electives		3	
			15	6	8

TOTAL: 149 credits

*Psych. 23 is recommended; **Engl. 7 and Comm. 2 recommended.
† H/HS 11, Foundations of Human Services is recommended.
†† Phil. 132, Medical Ethics, is recommended.

PT 106 Prof. Kosmahl
Therapeutic Exercise II 3 credits
Course prepares student to practice entry level orthopaedic physical therapy. Evaluation and treatment of musculoskeletal system dysfunction utilizing exercise, manual therapy (mobilization), and manual and mechanical traction are emphasized. Methods to clearly identify specific musculoskeletal problems, and to plan and implement appropriate physical therapy treatments are taught. Majors only. 2 hours lecture, 2 hours lab.

PT 108 Dr. Mattingly
Neuroscience 5 credits
Examination of the development and gross and cellular organization of the nervous system in man with consideration of its physiologic properties and probable mechanisms of information reception, transmission, and integration at spinal, supraspinal and cortical levels. Concepts of normal sensory-motor integration and neural center influence on motor activity and postural control will be reviewed. Clinical manifestations of dysfunctions relevant to physical therapy practice will be discussed. Majors only. 4 hours lecture. 2 hours lab.

PT 109 Prof. Nardone
Field Experience I 1½ credits
Introduction to physical therapy practice. On-site observations and practice of selected behaviors and procedures with patients in affiliated treatment facilities and settings. Majors only.

PT 110 Dr. Malloy
Medical/Surgical Lectures I 2 credits
Physician lectures providing an overview of selected diseases and disorders commonly referred for physical therapy evaluation and treatment. Relevant medical and surgical interventions will be reviewed with consideration of their implications for comprehensive patient management. Emphasis on musculoskeletal disorders and rheumatic diseases. Majors only.

PT 111 Dr. Aronica
Medical/Surgical Lectures II 2 credits
Continuation of PT 110. Physician overview of selected diseases and disorders commonly referred for physical therapy evaluation and treatment. Emphasis on referrals by neurologists, neurosurgeons, cardiologists, dermatologist, and thoracic surgeons. Majors only.

PT 112 Prof. Nardone
Field Experience II 2 credits
Intermediate physical therapy practice. Practice of selected behaviors and procedures with patients in affiliated treatment facilities and settings. Majors only.

PT 113 Dr. Barnes
Administrative Seminar 1 credit
Introduction to management process. Application of management principles and practices to a variety of physical therapy services. Majors only. 2 seminar hours.

PT 114 Dr. Barnes, Profs. Soto, Steppacher
Rehabilitation 5 credits
Introduction to contemporary philosophy and scope of rehabilitation. Introduction to the psychosocial aspects of disability. Evaluation of functional abilities and capabilities with an appreciation for rehabilitation potential. Laboratory implementation of treatment plans for physical conditioning and for specific goals of functional training for selected conditions and disabilities, i.e., amputee, head trauma, spinal cord injury and C.V.A.. Introduction to perception, activities of daily living, with an appreciation for architectural barriers in the home and community settings. Introduction to orthotics, wheelchair prescriptions, and wheelchair cushions. Introduction to sexuality and disability. Majors only. 3 hours lecture, 4 hours lab.

PT 115 Staff
Introduction to Clinical Research 3 credits
Introduction to statistical concepts, principles and methods for physical therapy clinical research. A nonrigorous approach is employed with emphasis on practical application of content to relevant clinical data. Majors only.

PT 117 Staff
Scientific Inquiry 2 credits
Introduction to research design. Review and critical analysis of research reported in relevant professional literature. Design, implementation, and interpretation of experimental research study relevant to clinical physical therapy practice. Preparation of formal research proposal and presentation of platform, poster, and journal reports of research findings. Majors only. 1 hour lecture, 2 hours lab.

PT 120 Dr. Mattingly
Concepts in Pathology 2 credits
Introduction to basic principles of pathology with emphasis on disease concepts and mechanisms relevant to physical therapy practice. Majors only.

PT 121 Prof. Kosmahl
Kinesiology and Pathokinesiology 4 credits
Comprehensive study of normal human movement and movement dysfunction associated with selected forms of pathology. Emphasis is placed on joint arthrokinematics and the mechanics of muscle actions, and biomechanical factors are discussed. Normal and pathological gaits are studied. Majors only. 3 hours lecture, 2 hours lab.

PT 122 Prof. Pellino
Therapeutic Exercise III 5 credits
Introduction to evaluation of movement disorders and treatment with neuromuscular disorders and treatment with neuromuscular re-education techniques. Overview of selected exercise theories and principles. Laboratory practice of related techniques. Majors only. Three hours lecture, 4 hours lab.

PT 123 Prof. Pellino
Developmental Pediatrics 2 credits
Comprehensive study of principles of development and developmental patterns of the infant and young child. Integration of growth and development concepts in assessment, program planning, and treatment delivery for infants and children with developmental disabilities and neuromotor dysfunction. Emphasis is placed on age-related expectations and recognition of deviations from normal in the physical, psychomotor, and perceptual areas of behavior.
Majors only. 1 hour lecture, 2 hours lab.

PT 199 Prof. Nardone
Clinical Internships 8 credits
Intensive clinical practice on a full-time basis for 4-8 week periods in at least two different physical therapy settings. Emphasis is placed on development of increased independence in the management of patients. Majors only.

Prof. Edmund Kosmahl with Physical Therapy students.

Dexter Hanley College

Dr. Shirley M. Adams, Dean

Dexter Hanley College has been an important part of the University for over half a century. It began as The Evening College and in 1976 its mission was broadened to include service to the local community. Today Hanley College encompasses both the evening credit and the non-credit divisions of the University.

GOALS AND OBJECTIVES

Hanley College is committed to carrying out the Jesuit tradition by offering quality programs, quality services, and the opportunity for non-traditional students to accomplish their educational goals. Hanley College is dedicated to serving the local community and continually updates its programs and services in response to the community's ever-changing needs.

Hanley College serves primarily the following five groups:

a. Adults who wish to pursue an undergraduate degree in evening or weekend hours.
b. Adults who wish to pursue an undergraduate degree on a part-time basis.
c. Students who want to obtain an associate degree or certificate.
d. Adults who want to improve their professional competence and/or to prepare themselves for new careers.
e. Adults who want to take advantage of educational programs for their own enrichment.

Hanley College is dedicated to helping students succeed by offering scholarship opportunities, life experience credits, and academic and career counseling.

DEGREE PROGRAMS

BACHELOR'S DEGREE

Accounting
Communication
Communication/English
Computer Science
Criminal Justice
Economics/Finance
Education/Elementary**
Education/Secondary**
Health Administration
Health/Human Services
History
Information Systems
Liberal Studies
Management
Marketing
Nursing*
Political Science
Production & Operations Management
Psychology**
Sociology

ASSOCIATE DEGREE

Associate In Arts
Business
Criminal Justice
Electronics Engineering***
Health Administration
Health/Human Services
Information Systems
Political Science
Public Administration
Social Relations/Gerontology

*For those with R.N. only.
**Some daytime courses will be required.
***At present, physics, engineering and electronics engineering courses are available only during daytime hours.

ADMISSION INFORMATION

Application for Admission

Admission to Dexter Hanley College at the University of Scranton is based on the applicant's academic record, on evidence of ability to do college work and benefit from it, and on indications of personal choice and desire to attend Hanley College. Application forms may be obtained from the DHC Office or may be requested by phone (961-7580).

Admission of First-Time Students

Dexter Hanley College operates on a rolling admissions plan which means that applications are processed on a continual basis as they are received. All candidates are informed of the admission committee's decision within two to three weeks after the completion of their file of supporting credentials.

To complete the application file, the candidate must have the following sent to the Hanley College Office:

1. A completed application form accompanied by the $10.00 application fee.
2. An official high school transcript or Graduate Equivalency Diploma (GED) including scores.

All prospective students are strongly encouraged to seek educational counseling prior to the time of actual registration. Appointments for counseling may be made by contacting the Hanley College Office (961-7580).

Admission of Transfer Students

Under the rolling admissions plan, transfer candidates may be considered on the basis of their last semester's courses and previous work at an accredited college or university. All candidates are informed of the admission committee's decision within two to three weeks after completion of their file of supporting credentials.

To complete the application file, a transfer candidate must have the following sent to the Hanley College Office:

1. A completed application form accompanied by the $10.00 application fee.
2. Official high school transcripts.
3. Official transcripts, mailed directly from every college or university attended.

In general, advanced standing will be granted for those subjects for which there are equivalent courses at the University, for which the student received grades of C or higher, and for those which are acceptable for the specific program the student chooses on entering Hanley College. If the student changes major at a later date, another review of transfer credits will be made at that time, and the student will be given a written evaluation clearly indicating the transfer credits which are applicable to the new major. In all cases, a minimum of 63 credits must be earned at the University of Scranton for a baccalaureate degree from the University.

In the case of students transferring from other colleges within the University of Scranton, all coursework satisfactorily completed and applicable to the student's program of studies will be accepted in Dexter Hanley College.

A student who has been dismissed from any other college will not be allowed to register for courses in the semester immediately following the dismissal. The application of such a student will, however, be reviewed at the close of that period and admission *may* be granted at that time.

Admission of Special Students

Special students are those who have already completed a B.A. or B.S. degree at the University of Scranton or another institution, some part-time students taking courses for "self-improvement," and men and women admitted to Certificate Programs.

Students who already have a baccalaureate degree from the University of Scranton are eligible to complete a second major or an academic certificate in Hanley College. Students who hold a baccalaureate degree from another accredited institution are eligible to complete a second degree (see p. 20). A student's file is complete when the Hanley College Office has received a completed application and official transcripts from all colleges previously attended.

Students wishing to complete a certificate program in Hanley College must meet the requirements specified by the appropriate department. (Details about the Certificate Programs currently available will be found on pages 173-178.)

Part-time students who do not plan to work toward a degree, a certificate, or a second major must also file the application for admission and must arrange for official transcripts to be sent to the Hanley College Office.

Admission as a special student does not imply admission to candidacy for degree.

Conditional Admission

Official transcripts of high school and previous college courses (where applicable) must be submitted to the Hanley College Office not later than three weeks before the beginning of classes each semester so that the student may be considered for official admission to the College. A student may, however, be admitted conditionally if the official transcripts have not been received in the DHC Office before classes begin.

The student whose official records are not received within three weeks AFTER classes have begun will be required to withdraw from the College, and forfeit a percentage of the tuition paid, according to the refund policy as set forth for all students by the Treasurer's Office.

Upon receipt and evaluation of the official academic transcripts, the Hanley College Office will notify the student regarding acceptance or rejection. The student who is rejected will be allowed to finish the semester if he/she wishes to do so but will not be allowed to register for subsequent terms. The student who is accepted will be subject to all rules, regulations, and policies of regularly enrolled students. Because official academic transcripts are necessary for effective academic advising, the student who enters under the conditional admission policy takes full responsibility for any errors in course selection and for all extra costs involved in making changes in class registrations.

AUDITORS

Hanley students may register as auditors with the approval of the dean. Although regular attendance is expected of auditors, they are not liable for assigned work, quizzes, or examinations, and they receive no credit for the course. Students not enrolled as auditors who wish to change their status to that of auditor must do so at least one week before the end of the quarter in the Fall or Spring Semesters, and at least three class meetings before the half-way point in the Intersession and either Summer Session. There is no reduction in tuition and fees for auditing a course.

HANLEY COLLEGE BACCALAUREATE DEGREE PROGRAMS

Dexter Hanley College offers a number of baccalaureate degree programs in common with other colleges of the University.

The Hanley College baccalaureate programs have the same general education requirements (usually 63 credits) as the corresponding programs in the College of Arts and Sciences, the School of Management, and the College of Health, Education and Human Resources. The distribution table for these general education requirements is shown on pg. 21.

It should be noted, however, that the physical education requirement, described on pg. 19, is waived for DHC students.

The major programs in computer science, criminal justice, history, political science, psychology, and sociology are identical with those in the College of Arts and Sciences, and the requirements are outlined in detail on pp. 41-132 of this Bulletin.

The major programs in health/human services are identical with the College of Health, Education and Human Resources, and the requirements are outlined in detail on pp. 147-162 of this Bulletin.

The major programs in accounting, economics/finance, management and marketing are shown in detail under the School of Management listing on pp. 133-146.

Hanley College also offers three major programs unique to itself: B.S. in Nursing for Registered Nurses, Communication/English, and Liberal Studies. Descriptions for these programs follow.

B.S. FOR R.N. STUDENTS

The registered nurse student is recognized as an adult learner who comes with a diversity of life experiences, education and clinical expertise, as well as motivation and ability to learn independently and collaboratively. To facilitate advanced placement, opportunity is provided for students to validate, by examination, previously acquired educational and clinical competencies.

The program, accredited by the National League for Nursing, is open to all registered nurses who meet admission requirements.

1. Transfer courses, especially courses in the sciences, must be equivalent to courses in the nursing program at the University of Scranton (science courses taken at a non-degree program are accepted if they were taken at an affiliated college and received college credit); a grade of C or better must have been earned. If chemistry courses to be transferred do not have sufficient biochemistry, in the opinion of the faculty, the student may challenge Chem. 14 or enroll in the course.
2. Natural science courses from a period ten years prior to date of matriculation at the University of Scranton are generally not accepted for transfer; however, Biology 13, 14 or 125 and Chemistry 13 and 14 may be challenged. If a grade of "C" or better is not achieved, the student must enroll in the course. Transcripts will be individually approved by the chair of the nursing department.
3. CLEP credit may be applied except for nursing, natural science, clinical or laboratory courses.

To apply for admission to the B.S. for R.N. track, students should submit the following with a completed application form and fee:

1. Official transcripts from high school, nursing school and other colleges attended.
2. Scores from College Board Scholastic Aptitude Test or NLN Preadmission RN Examination.
3. A copy of State Board/N-CLEX results.
4. A copy of current Pennsylvania Registered Nurse License.
5. Two letters of recommendation: one academic, one from employer or clinical supervisor.

COMMUNICATION/ENGLISH

The major program in Communication/English aims to help the student to acquire the analytic and critical facilities that close study of literature can develop, as well as an understanding of the processes and institutions whereby communication takes place in our society. The graduate of this program should be prepared to take advantage of a variety of career opportunities: journalism, public relations, government service, managerial training, broadcasting.

To complete the program, a student takes 36 credit hours of course work in English and Communication, 18 credits in cognate fields, and 60 credits in the general education and elective areas. This degree program is open only to Hanley College students, although students registered in other colleges of the University are welcome to enroll in individual courses offered in the Communication/English program.

LIBERAL STUDIES

The Liberal Studies major is a highly individualized program offered exclusively through Dexter Hanley College. Applicants who have attended other accredited colleges may transfer up to 60 credits for applicable courses in which a grade of "C" or better was earned. Students who qualify for this interdisciplinary degree program are eligible to earn as many as 30 semester hours by passing the CLEP (College Level Examination Program) tests with acceptable scores and/or to apply for Assessment of Prior Learning acquired through professional experience or formal course work in noncollegiate settings. Degree requirements for the Liberal Studies major are outlined in the chart which follows:

DEGREE REQUIREMENTS FOR LIBERAL STUDIES

General Education		Credits
Area I	**Natural Sciences/Mathematics** (Biology, Chemistry, Physics, Math)	9
Area II	**Social/Behavioral Sciences** (Economics, Political Science, Psychology, Sociology, Education)	9
Area III	**Communication** (Communication, Computer Science, English 7, Foreign Lang., Applied Fine Arts)	9
Area IV	**Humanities** (English & Foreign Literature, Fine Arts, History)	18
Area V	**Philosophy/Theology** (Phil. 20 & 110–T/RS 21 & 22 2 other Phil. or T/RS electives)	18
Free Elective Tracks*:		3
	(A) ..... (B) ..... (C) ..... (D)	57
	Total Credits Required	123

*N.B.: In developing the track areas, the student will select 3 or 4 fields of study, with at least 12 credits and no more than 21 credits in any single field. Careful attention must be given to selecting the areas of study as well as to determining the number of credits to be taken in each area selected. Thus, the student may be asked to seek advice from faculty members in several Departments before drawing up a final degree plan.

ASSOCIATE DEGREES

ASSOCIATE IN ARTS

Background

The Associate in Arts may be considered the natural companion to the Bachelor of Arts degree, serving many of the same kinds of students served by the latter. The Associate in Arts is often classified as the Liberal Arts "transfer degree" in that it provides the student with the broad exposure to the arts and sciences necessary for later specialization in four-year degree programs in Liberal Arts and in business and professional fields. Some students may wish to use the A.A. degree as the foundation of one of the two University of Scranton baccalaureates (the Bachelor of Arts or the Bachelor of Science); whereas others will find that their educational and career goals are best served by using the degree as the basis for entry into programs offered by other institutions.

Degree Requirements for Associate in Arts

The Associate in Arts is the equivalent of a two-year Liberal Arts degree. Each candidate for the degree must complete sixty semester hours of credit. Of these, fifty-four credits must be earned in the Liberal Arts, according to a prescribed plan covering the humanities, social/behavioral sciences, and natural sciences/mathematics. The remaining six semester hours are allotted to free electives in either liberal or non-liberal arts subjects. Applicants who have attended other accredited colleges may transfer up to 30 credits for applicable courses in which a grade of "C" or better was earned. An outline of the degree credit requirements follows:

Credits Required by Area of Study

Area I	Natural Sciences/Mathematics	9
Area II	Social/Behavioral Sciences	9
Area III	Communication	
	Comm. 2—Fundamentals of Speech	3
	English 7— Composition	3
	Elective in Speech, Writing, Foreign Language, Computer Science, App. Fine Arts	3
Area IV	Humanities	18
Area V	Philosophy/Theology	
	Phil. 20 —Introduction to Philosophy	3
	T/RS 21—Theology I	3
	Phil 110-Ethics or T/RS 22-Theology II	3
		54
Free Elective		6
	TOTAL	60

A comparison of the A.A. degree with the Bachelor of Arts degree reveals that the Liberal Arts distribution requirements are essentially similar. By careful planning, the student can utilize part of the distribution plus the free electives to lay the foundation for a major in a specific discipline in the humanities, social/behavioral sciences or natural sciences/mathematics. Finally, the A.A. will serve to satisfy many of the Liberal Arts distribution requirements and free electives for one of the degrees in business, accounting, management or marketing.

ASSOCIATE DEGREES IN CAREER-RELATED FIELDS

Background

The Associate of Science degree in career-related fields has been designed as the natural companion to the Bachelor of Science degrees in those majors. At the present time the University offers associate degrees in the following areas:

Business
Criminal Justice
Electronics Engineering
Health Administration
Health and Human Services
Information Systems
Political Science
Public Administration
Social Relations/Gerontology

Degree Requirements

To earn the Associate of Science degree in one of these career-related fields (except Business, Electronics Engineering, and Information Systems, described separately below), the student must successfully complete sixty semester hours of credit. Of these, forty-two credits must be earned in the Liberal Arts, according to a prescribed plan covering the humanities, social/behavioral sciences, and natural sciences/mathematics. Twelve additional credits must be earned in the major field. The remaining six semester hours are allotted to free electives in either the area of specialization or any other field. An outline of the degree credit requirement is provided below.

CREDITS REQUIRED BY AREA OF STUDY

For associate degrees in criminal justice, health administration, health/human services, political science, public administration, social relations/gerontology; in selecting courses to meet the credit requirements by "areas" of study, the student will be guided by this listing:

Area I	Natural Sciences	(Biology; Chemistry; Mathematics; Physics)	6 cr
Area II	Social/Behavior	(Business; Economics; Human Services; Criminal Justice; Pol./Sci.; Psychology; Sociology)	9 cr
Area III	Communication	(ENGL 3, 7; COMM 2; Communication; Computer Science; Modern Language)	9 cr
Area IV	Humanities	(Fine Arts; History; Literature)	9 cr
Area V	Philosophy & T/RS	(PHIL 20 & T/RS 21 are required)	9 cr
Free			6 cr
"Major"			12 cr
		TOTAL:	60 cr

BUSINESS

General Education

	Dept. and No.	Description of Course	Credits
Area I	Math 6, 7	Quantitative Methods I, II	6
Area II	Econ. 11, 12	Prin. of Econ. I, II	6
	Soc. Studies	Elective	3
Area III	Engl. 7	Composition	3
	Comm. 2	Fundam. of Speech	3
	CMPS 21	Computing, Bus. & Soc. Sci.	3
Area IV	Humanities	Electives	9
Area V	Phil. 20	Intro. to Phil.	3
	T/RS 21	Theology I	3
	Phil. 110 or T/RS 22	Ethics Theology II	3
			42

Major/Cognates

	Mgt. 1	Intro. to Business	3
	Acc. 3, 4	Financial/Management Acctg.	6
	QMS. 15, 16	Statis. for Business I, II	6
	Mgt. 9	Legal Environ. of Business	3
			18
		TOTAL	60

ELECTRONICS ENGINEERING

General Education

	Dept. and No.	Description of Course	Credits
Area I	Math 13, 14	Pre-Calculus, Analysis I	8
Area II	Soc./Behav. Sci.	Elective	3
Area III	Engl. 7	Composition	3
	Comm. 2	Fundam. of Speech	3
Area IV	Humanities	Electives	6
Area V	Phil. 20	Intro. to Philosophy	3
	T/RS 21	Theology I	3
			29

Major/Cognates

	Phys. 11, 12	Elem. of Physics (& labs)	8
	Phys. 21	Elem. of Modern Physics	4
	Math 21, 22	Analysis II, III	8
	CMPS 20 or CMPS 24	FORTRAN 77 or Computer Science I	3
	Engr. 23	Solid State Materials Sci.	3
	Engr. 32	Intro. to Comput. Aid. Design	1
	EE. 24	Circuit Analysis (& lab)	4
	EE. 30	Digital Circuits	3
	EE. 106	Discrete Electron. Devices (& lab)	4
	EE. 107	Digital Logic Circuits (& lab)	5
			43
		TOTAL:	72

INFORMATION SYSTEMS

General Education

	Dept. and No.	Description of Course	Credits
Area I	Math 10, 11	Discrete Math I, II	6
Area II	Econ. 11-12 or Pol. Sci. 5-6	Prin. of Economics, I, II Intro. to Pub. Admin. I, II	6
Area III	Engl. 7	Composition	3
	Engl. 9	Techn. & Business Writing	3
	Comm. 2	Fundam. of Speech	3
Area IV	Humanities	Electives	9
Area V	Phil. 20	Intro. to Philosophy	3
	T/RS 21	Theology I	3
	Phil. 110 or T/RS 22	Ethics Theology II	3
FREE	Elective	Elective*	3/4
			42/43

*Math 13-if needed preliminary to taking Math 14 (4 cr.)

Major/Cognates

CMPS 24, 25	Computer Science I, II	7
CMPS 100	Machine Org. & Assemb. Prog.	3
CMPS 110	Data Structures	3
CMPS 140	File Process, with COBOL	4
Math 14	Calculus I	4
		21

TOTAL: 63/64

Alumni Memorial Library

CERTIFICATES FOR ACADEMIC CREDIT

A Certificate Program is an educational opportunity to gain professional knowledge or training in a specific field before or after pursuing a degree.

The courses a certificate student takes are part of the regular curriculum of the University. Most certificates are comprised of six to eight academic credit courses which are recorded permanently on a transcript in the Registrar's Office. Some certificates also include guided learning experiences.

Students enroll in the undergraduate certificate programs with a variety of educational backgrounds ranging from no college work to having earned a degree already. A student enrolled in a degree program in Dexter Hanley College may apply for and earn a certificate concurrently.

In order to earn a certificate, a student must maintain at least a C average in the certificate courses and must successfully complete any other requirements as stipulated for a specific certificate program.

Application to a certificate program is made through the Admissions Counselor in Dexter Hanley College. Each program will be coordinated by a faculty member in the appropriate department. After a student's application is approved by the certificate coordinator, the student is notified of his/her acceptance into the program and may then register. The certificate coordinator serves as a student's advisor in achieving the certificate. A student is responsible for conferring with his/her advisor as needed before registering and in the course of earning the certificate.

Each department reserves the right to modify its certificate program requirements. Admission to a certificate program is subject to department approval. In certain certificate programs the required courses may be transferred from an approved college or university, or may be waived on the basis of prior experience.

Certificates currently available include Alcohol/Drug Abuse Counseling, Computer Science, Information Science, Journalism, Specialized Writing, Drama/Theater, Gerontology, Health and Human Services, Health Administration; and several in the field of Business/Management: Pre-Business, Pre-Accounting, Accounting, Finance, Personnel, and Production Management.

CERTIFICATE IN COMPUTER SCIENCE
(18 credits)

A program for adults who seek to develop a familiarity with computers and their application to the industrial environment.

1. Individuals presently in industry who need to develop a greater awareness of computer applications.
2. Individuals who are seeking to develop entry-level skills necessary for industrial computing

Required Courses:

CMPS 24: Computer Science I
CMPS 25: Computer Science II
CMPS 110: Data Structures

Electives:

CMPS 100: Machine Organiz. & Assembly Lang.
CMPS 101: Operating System
CMPS 125: Artificial Intelligence
CMPS 150: Programming Languages
CMPS 160: Formal Language Theory

CERTIFICATE IN INFORMATION SCIENCE
(18 credits)

A program for adults who seek to develop a familiarity with computers and their application to the business environment.

1. Individuals presently in business who need to develop a greater familiarity of computer applications.
2. Individuals who are seeking to develop entry-level skills necessary for business computing.

Required Courses:

CMPS. 24: Computer Science I
CMPS. 25: Computer Science II
CMPS. 140: File Processing with COBOL
CMPS. 127: Information Systems Analysis

Electives: (Select 2 courses):

CMPS. 110: Data Structures
CMPS. 136: Advanced COBOL
CMPS. 138: Business Systems Analysis
CMPS. 142: Database Systems

CERTIFICATE IN ADVERTISING/PUBLIC RELATIONS
(18 credits)

A program designed for adults who are seeking entry-level or advancement opportunities in advertising, promotion, and public relations.

BEGINNING

Required Courses:

Comm. 152: Newswriting
Comm. 161: Advertising
Comm. 170: Organizational Communication

Elective Courses (select three):

Comm. 103: Logical and Rhetorical Analysis
Comm. 120: Mass Communication
Comm. 123: Mass Media Management
Comm. 153: Editing
Comm. 162: Advertising Practicum
Comm. 171: Public Relations
Comm. 172: Promotional Writing

ADVANCED

Required Courses:

Comm. 180: Mass Communication Law
Comm. 190: Communication Theory and Research

Elective Courses (select four):

Comm. 103: Logical and Rhetorical Analysis
Comm. 123: Mass Media Management
Comm. 130: Responsibility in Communication
Comm. 153: Editing
Comm. 162: Advertising Practicum
Comm. 164: Political Communication
Comm. 171: Public Relations
Comm. 172: Promotional Writing
Comm. 195: Directed Independent Study
Comm. 198: Senior Project

CERTIFICATE IN SPECIALIZED WRITING
(18 credits)

A program for adults who wish to develop their writing skills in specific areas.

1. Individuals who wish to develop skills in specific areas of writing.
2. Individuals who are seeking to refine existing writing skills.

Required Courses:
Engl. 7: Composition
Engl. 112: Advanced Composition

Electives (Select 4 courses):
Engl. 9: Scientific Writing
Engl. 12: Writing for the Law
Engl. 117: Film Criticism
Engl. 121: Script Writing
Engl. 124: Poetry Writing I
Engl. 126: Fiction Writing I
Engl. 128: Poetry Writing II
Engl. 129: Fiction Writing II
Engl. 175: Introduction to Publishing
Engl. 176: Magazine Editing
Engl. 177: Children's Literature
Comm. 157: Television Journalism

CERTIFICATE IN DRAMA/THEATRE
(21 credits)

A program for adults who wish to develop their knowledge of and skills in the areas of drama and theatre.

1. Individuals who wish to develop acting skills for personal satisfaction.
2. Individuals who wish to develop more professional or semi-professional skills in drama and/or theatre.

Required Courses:
Engl. 27: Introduction to Drama
Engl. 107: Introduction to Theatre
Engl. 108: Introduction to Acting

Electives (Select 4 courses):
Engl. 109: Intermediate Acting
Engl. 110: Advanced Acting
Engl. 118: Drama Practicum
Engl. 131: Shakespeare; Tragedies
Engl. 132: Shakespeare; Comedies
Engl. 149: Dramatic Comedy
Engl. 150: Modern Drama
Engl. 151-152: History of the Theatre, I, II

CERTIFICATE IN ALCOHOL/DRUG ABUSE COUNSELING
(24 credits)

A program designed for teachers, school counselors or individuals interested in preparatory course-work toward state certification. This program has been approved by the Pennsylvania Alcohol and Drug Abuse Counselors Certification Board (PADACCB). State certification also requires three years' work experience in a treatment facility and a certifying oral examination.

Required Courses:
H/HS. 101: Case Mgmt. & Interv.
H/HS. 102: Counsel. Theo. & Tech.
H/HS. 117: Addictive Behavior
Psyc. 23: Fund. of Psychology
Intd. 45: Health & Legal Implications of Chemical/Drug Abuse

Electives (Select three courses):
H/HS. 103: Group Dynamics
C/SF 172: Marital & Family Therapy
Psyc. 145: Abnormal Psychology
Soc. 21: Principles of Sociology
Soc. 22: Social Problems
S/CJ 117: Sociology of Deviance
Educ.: Substance Education & Prevention

CERTIFICATE IN GERONTOLOGY
(18 credits)

A program designed to meet the needs of persons either currently employed in the field of aging by providing course work designed to increase and refine knowledge and practicioner skills (ADVANCED), or those persons considering a career in the field as a basic certificate specially designed for those with some previous college preparation (BASIC).

BASIC
Required Courses:
Gero. 101: Intro. to Gerontology
Gero. 103: Health & Aging
Gero. 105: Social Policy & Aging
Soc. 21: Prin. of Sociology

Electives (Select two courses):
Gero. 106: Crime & Aging
Gero. 107: Aging & the Community
Gero. 109: Aging & Human Behavior
Gero. 112: Aging & the Life Cycle
Gero. 122: Soc. Problems of Aging
Gero. 126: Aging & Death

ADVANCED
Required Courses:
Gero. 101: Intro. to Gerontology
Gero. 103: Health & Aging

Electives (Select four courses):
Gero. 106: Crime & Aging
Gero. 107: Aging & the Community
Gero. 109: Aging & Human Behavior
Gero. 110: Aging in Anthropological Prespective
Gero. 112: Aging & the Life Cycle
Gero. 122: Social Problems of Aging
Gero. 126: Aging & Death
Gero. 191: Independent Study
Gero. 198, 199: Practicum in Gerontology

CERTIFICATE IN HEALTH AND HUMAN SERVICES
(18 credits)

A program for adults who seek to develop a familiarity with the health and human services environment.

1. Individuals considering entering the health/human services field.
2. Entry-level employees who are seeking career advancement.

Required Courses:

H/HS 11	Foundations of Human Services
Soc. 21	Principles of Sociology
H/HS 12	Health and Human Services Interventions
Psych. 23	Fundamentals of Psychology
H/HS 115-116	Health and Medical Information I, II

CERTIFICATE IN HEALTH ADMINISTRATION
(18 credits)

A program for adults who seek to develop administrative skills in the health and human services profession.

1. Individuals considering entering the field of H/HS.
2. Individuals presently in the health/human services profession.
   A. Those seeking to upgrade present skills.
   B. Those seeking career advancement.

Required Courses:

H/HS 11	Foundations of Human Services
H/HS 12	Health and Human Services Interventions
H/HS 115-116	Health and Medical Information I, II
HADM 141	Health Administration
HADM 112	Health Systems

CERTIFICATE PROGRAMS IN BUSINESS/MANAGEMENT

LEVEL I

Level I certificate programs will comprise 18 credits, with no more than 6 credits allowed by way of transfer from another college. Level I programs are open to any qualified students (i.e.,, who meets DHC entrance requirements).

PRE-ACCOUNTING
(18 credits)

Acc. 1,2	Finanical Accounting I, II
Acc. 14	Law for Accountants
Mgt. 9	Legal Environment of Business
CMPS 1	Computer Literacy
Econ. 101	Essentials of Economic Theory

PRE-BUSINESS
(18 credits)

Acc. 3, 4	Financial Accounting — Managerial Accounting
Econ. 11, 12	Principles of Economics I, II
QMS. 15, 16	Statistics for Business I, II

LEVEL II

Level II certificate programs will comprise 18 credits, with no more than 3 credits allowed by way of transfer from another approved college. Level II programs are open only to students who have achieved junior status, and have completed the appropriate Level I program.

ACCOUNTING
(18 credits)

Acc. 21, 23	Intermediate Accounting I, II
Acc. 115	Cost Accounting
Acc. 121, 123	Auditing Theory—Federal Taxes
Acc. Elective	

FINANCE
(18 credits)

Eco. 117, 118	Intermediate Economics I, II
Fin. 110	Corporation Finance I
Fin. 160	Monetary and Financial Economics
Fin. 173	Financial Management
Fin. Elective	

PRODUCTION MANAGEMENT
(18 credits)

QMS. 109	Introduction to Management Science
QMS. 115	Production & Operations Management
QMS. 150	Advan. Production & Inventory Management
QMS. 151	Management of Materials, Methods and Productivity
QMS. 152	Computer Applic. to Manufacturing Management
QMS. 153	Business Information Management

PERSONNEL MANAGEMENT
(18 credits)

Mgt. 108	Organization and Management
Mgt. 116	Organizational Behavior
Mgt. 140	Personnel Management
Mgt. 141	Labor Relations
Mgt. 142	Organization Theory
Mgt. 143	Group Dynamics

PRE-MBA
(18 credits)

Mgt. 107	Managerial Marketing
Mgt. 108	Organization and Management
QMS. 109	Intro. to Management Science
QMS. 115	Production and Operations Science
Mgt. 116	Organizational Behavior
Fin. 110	Corporation Finance

SEQUENCE OF STUDY/PREREQUISITES

Students enrolled in degree programs in Hanley College are strongly advised to follow as closely as possible the sequence of studies listed for their chosen major. That students may be assured of having the adequate background for the successful completion of certain courses, prerequisite courses are sometimes listed. The course description in the earlier pages of this Bulletin contain the necessary information on prerequisites. In some cases practical experience may compensate for the lack of prerequisite courses, but such requests for exceptions must be approved by the departmental advisor at the time of registration. Students should also check with their departments for specific scheduling information on course sequences in their major. Since not all required courses are offered *each* semester, careful planning should be done in advance to assure smooth progress through the degree program.

SPECIAL SUMMER PROGRAM IN HUMANITIES

The goal of the Special Summer Program in Humanities is to provide university-level learning opportunities for adult and nontraditional students who are just beginning their collegiate careers. It entails providing an overview of the scholarly resources available at this university and carefully designing the kind of serious study projects that cultivate students' critical thinking and reading skills, study habits, and oral and written expression, while adding to their general knowledge in a wide range of humanistic disciplines. The knowledge, understanding and skills that students can gain by confronting the liberal arts tradition in the early stages of their university studies will provide them with a solid base on which to build in the future.

Hum. 1: **Reading and Research:** This course is designed to increase the student's proficiency in reading, research, and study skills. Readings will be selected from various fields in the humanities, and emphasis will be on preparing students for the kinds of reading they will be required to do in their future University course work. (3 credits)

Hum. 2-3: **Modes of Expression:** This course is designed to assist the student to refine both writing and speaking abilities. The laboratory approach allows individual attention by instructor and lab assistants in the exploration of various modes of expression in a wide range of areas. Successful completion of Hum. 2-3 fulfills the written and oral skills requirement of the University. (6 credits)

These courses will be open to Hanley College students only (i.e., not to students enrolled in other undergraduate schools of the University of Scranton). Credits may be applied to either GE Area III or GE Area IV, with the approval of the Hanley College Dean.

TELECOURSES

Telecourses meet the needs of those students who have difficulty attending classes on campus. Courses are shown one hour per week on WVIA. Students complete weekly assignments and either mail them in or drop them off at the Hanley College Office. Meetings with instructors are reduced from the typical three hours per week. These courses are geared to highly motivated students capable of doing independent work. (Courses offered vary each semester.)

CREDIT FOR ACADEMICALLY RELEVANT LEARNING

Hanley College provides two types of opportunities for students to earn credit for university-level learning that takes place outside the classroom setting:

College-Level Examination Program (CLEP)

The College-Level Examination Program has been established to enable students of all ages to earn college credit by examination. Through the CLEP tests, applicants may gain credit in many academic subjects applicable to their degree programs. Individuals who wish further information about these examinations should consult the Dean of Hanley College or write directly to the Program Director, College-Level Examination Program, College Entrance Examination Board, Box 1824, Princeton, N.J. 08540.

Assessment of Prior Learning

Many students have acquired substantial amounts of "experiential learning" outside a formal college or university classroom in jobs, military service, or nonaccredited institutions. One who wishes to have this learning assessed for possible credit will enroll in a one-semester course, to document relevant experiences and the knowledge gained from them for departmental review. Faculty evaluators from the appropriate department(s) will evaluate the portfolio and recommend a credit award for the student's learning. For further information about this program, contact Hanley College (961-7580).

ACADEMIC REGULATIONS

Hanley College students should consult pages 23-26 of this Bulletin for academic regulations common to all four undergraduate colleges of the University. They should be aware of the following policies which relate specifically to those enrolled in DHC:

Cross-Registration

A student registered in Dexter Hanley College may take courses in the other colleges of the University on a space available basis, provided he/she meets the conditions for cross-registration as set forth by the Deans and announced prior to each registration period.

Dean's List

Since many students in Hanley College are enrolled on a part-time basis, the Dean's List criteria for this school differ somewhat from those described on page 24. Students in DHC may earn Dean's List distinction provided they carry at least three courses (9 credits) during the semester and earn at least at 3.3 QPI with no D's or F's. The Dean's List is published at the end of the fall and spring terms each year.

CAMPUS LIFE

Hanley students should consult the Student Handbook for information about such practical matters as I.D. cards, parking permits, and opportunities for commuter participation in various aspects of University life. DHC participation in campus government is provided through the Hanley College Student Council and through Hanley College representation on the University Senate.

TUITION AND FEES 1988-89

Hanley College Tuition	$204.00 per credit
University Fee for Hanley Students	25.00 per semester
Application Fee for Hanley Students	10.00
Orientation Fee for Hanley Students	20.00
Recreational Complex Use Fee for Hanley Students (optional)	50.00 per semester
Prior Learning Portfolio Review Fee	30.00 per credit

Other course and service fees common to all undergraduates are found in the next section of this Bulletin.

PARENTS' PROGRAM

Whenever at least one dependent child from a family is in attendance at the University as a full-time undergraduate student, a special family tuition reduction policy will apply for a parent enrolled in Dexter Hanley College. The amount of Tuition Credit that will be awarded each semester will be calculated after other financial aid has been applied by the Treasurer's Office personnel. Forms and additional information may be obtained from the Treasurer's Office or from Hanley College.

TUITION POLICY FOR SENIOR CITIZENS

Senior citizens 60 years of age or over will be allowed to register for courses at the University of Scranton on a "space available" basis with no tuition charges. A registration fee for credit courses, lab fees and materials fees where applicable, and textbook costs will be charged.

The policy applies to courses in all colleges of the University. If a course is taken for credit, the senior citizen must meet all qualifications and prerequisites for the course.

Senior citizens will register with the Hanley College Office, and papers will be forwarded to the other appropriate offices for processing. This will assure a minimum of waiting in line, etc.

Space availability will be determined as soon as possible in order that the senior citizen will know of his or her acceptance in a class in time to make necessary arrangements for attendance. A minimum of 10 "regular" students must be enrolled for a course before a senior citizen will be allowed to register with no tuition charges. (Otherwise the course is subject to cancellation.)

FINANCIAL AID FOR HANLEY STUDENTS

At the present time several forms of financial aid are available for students enrolled in Dexter Hanley College.

Pennsylvania Higher Education Assistance Agency

Hanley College students are eligible for PHEAA grants if they are taking twelve credits a semester; they are eligible for PHEAA loans if they are taking at least six credits. Students applying for this aid are required to file a formal University of Scranton Financial Aid Application, which includes all the necessary financial and tax information and documentation demanded by both federal and state programs.

Pell Grants

Hanley students taking at least six credits a semester are eligible to apply for federal grants administered under the PELL GRANT program. For these grants, too, the University of Scranton Financial Aid Application and the accompanying documentation are required.

Dexter Hanley Scholarship

Partial tuition scholarships are available for Hanley students who demonstrate a high degree of need as well as academic competence.

Robert L. McDevitt Scholarship

Income from a fund established in 1977 provides scholarship assistance to Hanley College students. The scholarship was established by Robert L. McDevitt, a Georgetown University classmate and longtime friend of Father Dexter Hanley, S.J., who served as President of the University from 1970 to 1975.

Newcombe Scholarship for Mature Women

The Charlotte W. Newcombe Foundation provides scholarship funds for mature women students completing their education in preparation for a second career. These scholarships are available to any such "mature women" enrolled in any of the undergraduate schools of the University of Scranton, but obviously several each year are awarded to women enrolled in Dexter Hanley College.

Application forms for Dexter Hanley, McDevitt and Newcombe scholarships are available in the Dexter Hanley College office in April.

HANLEY CONTINUING EDUCATION

Non-Credit Courses designed to meet the needs of the mature student. These include refresher programs for those planning to begin studies for an associate or baccalaureate degree, courses for the professional who wishes to upgrade skills or qualify for a license, and courseS of general interest for those seeking cultural enrichment or personal development.

Conferences, Institutes, and Workshops, which are public service programs arranged for special groups or professionals in a specific area. Such programs occur both on and off campus; many are co-sponsored by other organizations. The Continuing Education Office is the unit on campus designed to award Continuing Education Units (CEU's), a nationally recognized means of documenting certain kinds of adult educational experiences.

Computer Assisted Design, The Department of Physics/Engineering and the Office of Continuing Education sponsor a series of Computer Aided Design seminars using AutoCAD Software. These training seminars have been developed to assist area professionals in learning more about this exciting new concept in design.

The three-day seminars are offered on a regular monthly schedule and use the up-to-date facilities of the University's new computer lab.

Elderhostel

Since 1981 the University has participated in ELDERHOSTEL, an international program that offers adult learners over the age of 60 the opportunity to share a short-term, residential experience of campus life. Through a network of colleges and universities in the United States, Canada, and abroad, older learners can spend a week on campus — living in dormitories, eating in student cafeterias, and using the school's cultural, academic, and recreational facilities.

For more information and registration details, interested individuals should contact the Office of Continuing Education at 961-7582.

Senior Citizen Discounts

Senior citizens may enroll in non-credit continuing education courses at half tuition, provided that there is a sufficient number of regular students enrolled for those courses.

For further information regarding any of the Continuing Education programs at the University, contact the Director by calling 961-7582.

SAINT PIUS X SEMINARY

In cooperation with the Diocese of Scranton and its Bishop, J. Clifford Timlin, D.D., the University offers a variety of academic degree programs to students training for the diocesan priesthood in the formation program at St. Pius X Seminary, Dalton, Pa. "The immediate aim of the college level formation for the candidate for the priesthood is to help him to mature as a liberally educated human person, committed to Christ and to the service of his neighbor." *(The Program of Priestly Formation)*

Bishop J. Carroll McCormick, then Ordinary of the Scranton Diocese, responding to the aims and objectives of the National Conference of Catholic Bishops, entered an agreement with the University of Scranton and the diocesan-owned seminary for student-candidates to become full-time students at the University of Scranton, while maintaining residence at the Seminary. At the Dalton campus, the seminarian's academic life is complemented by programs of personal and spiritual development. Through a series of supervised ministerial experiences, the seminarian is introduced to the life of the diocesan priest.

This cooperative relationship was established on July 13, 1970. Since then, 150 graduates of the University have been accepted in graduate schools of theology in the United States and Europe. Of that number, some 75 have been ordained for service to the Dioceses of Allentown, Harrisburg, Scranton, and the Archdiocese of Washington; some 74 graduates are currently pursuing master of theology degrees, prior to ordination to the pastoral ministry.

College seminarians matriculate as full-time students in four colleges of the University: College of Art and Sciences; School of Management; Dexter Hanley College; Graduate School. The programs enable the seminarians to have contact with their peers and with University professors and afford them an opportunity for a wide variety of degree programs.

Current enrollment includes students representing the Dioceses of Camden and Trenton, N.J; Albany, N.Y.; Charleston, S.C.; Grand Rapids, Mich.; Allentown and Scranton, Pa., and the Archdiocese of Washington.

In 1976, the University established the Saint Pius X Seminary Chair of Theology. Seminary faculty occupy the "teaching" Chair in the department of Theology and extend to both collegians and seminarians the opportunity for courses in theology from the pastoral perspective of diocesan priests.

All seminarians, unless excepted by the Seminary faculty, major in philosophy.

Rev. Joseph P. Kopacz, Dean of Studies

SPECIFIC COURSE REQUIREMENTS

I. SEMINARIANS MAJORING IN PHILOSOPHY:

In fulfillment of the general requirements of the philosophy department, the following courses are required by St. Pius X Seminary:

Philosophy

Phil. 20	Introduction to Philosophy
Phil. 110	Ethics
Phil. 113	History of Ancient Philosophy
Phil. 114	History of Medieval Philosophy
Phil. 121	Modern Philosophy
Phil. 108	Metaphysics
Phil. 28	Logic
Phil. 104	Epistemology

Seminarians may choose other electives in philosophy to fill out the requirements of the philosophy major.

Theology

	T/RS 21-22	Theology I-II
*	T/RS 102/103	Biblical Exegesis
*	T/RS 111	Pauline Letters
*	T/RS 112	Gospels and Jesus
	T/RS 120	Signs and Symbols

*Students must choose *one* of these four courses in biblical studies.

Communication

Engl. 7	Composition
Comm. 2	Fundamentals of Speech

Classical Languages

Latin 1-2	Elementary Latin
Latin 23-24	Intermediate Latin

Suggested sequence of courses to be followed in philosophy major if possible:

Freshman:	first semester—Phil. 20
	second semester—Phil. 110
Sophomore:	first semester—Phil. 113
	second semester—Phil. 114, Phil. 28
Junior:	first semester—Phil. 121, Phil. 104
	second semester—Phil. 108, Phil. elective
Senior:	first semester—Phil. elective
	second semester—Phil. elective

II. SEMINARIANS MAJORING IN OTHER AREAS:

Philosophy Requirement:
Phil. 20, Phil. 110, Phil. 113, Phil. 114, Phil. 121, Phil. 108, Phil. 28

Theology Requirement:
T/RS 21-22; T/RS 102 or 103 or T/RS 111 or T/RS 112; T/RS 120.

Communication Requirement:
Engl. 7, Comm. 2

Classical Language Requirement:
Latin 1, 2, 23, 24.

Outside the Classroom

Much of a student's education takes place outside the classroom. At the University of Scranton, some of the formal academic learning process takes place off campus in the various internship programs; on campus there are available traditional extra-curricular activities. In many instances, these activities merit and receive academic credit. They also provide further means by which potential becomes achievement.

EXTRACURRICULAR ACTIVITIES

DRAMATICS

The tradition of the theatre and dramatics in Jesuit colleges goes back four hundred years. As evidenced by the award of the Pulitzer Prize in Drama to Jason Miller, a 1961 graduate of the University, at Scranton this tradition thrives. Students write and stage their own dramatic productions, often for academic credit in English and Communication, or in place of the traditional course term paper.

Beyond these individual efforts, the University Players each year present several dramatic productions. Recent productions of the Players include *Grease, 1776, South Pacific, Pippin, Gaslight, Hot L Baltimore,* and Shakespeare's *Taming of the Shrew* and *Tempest.*

During the summer of 1984, the Oscar-winning British actress, Glenda Jackson, was a resident visiting professor. Her acting seminar used a Shakespearean play and a modern American drama as the primary teaching vechicle. Half of her students were from the University of Scranton, the other half from universities across the country. A similar venture occurred during Intersession (January term) 1988, when noted actor Richard Harris visited the University, and produced, with a largely University cast, his *Julius Caesar: A Work in Progress.*

DEBATE

The tradition of debate in Jesuit colleges and high schools is also strong at the University of Scranton. The Noel Chabanel Council of Debate gives interested students an opportunity to compete in debate and speech events on the intercollegiate level. University of Scranton debaters travel thousands of miles each year nationwide; the 1988 team took first honors in the finals of the Pennsylvania College Energy Debates.

PUBLICATIONS

The University offers a wide choice of journalism opportunities.

The *Aquinas* is the weekly All-American campus newspaper and positions are available to members of all classes.

Esprit is the award-winning campus literary journal.

History students have the opportunity to have their articles published in *Restrospect,* journal of the Royals Historical Society.

The yearbook, *Windhover,* is annually produced by the students.

THE UNIVERSITY BANDS

The Bands include a Concert Band, a Jazz Band, and a Pep Band which plays at sports events. The Bands draw their membership from the more than 200 band musicians who attend the University of Scranton.

STUDENT CLUBS

Biology Club
Business Club
Political Science Club
Ski Club
Pre-Law Society
Social Science Club
Physical Therapy Club
Computer Science Club
Royals Historical Society
Students for Life
Psychology Club
Schrodinger Chemical Society
International Students Association
College Democrats
College Republicans
ROTC Rangers

Communications Club
Veterans Club
India Club
Philosophy Forum
Student Education Association
Horticulture Club
Human Resources Association
Bowling Club
Women's Business Honor Society
Nursing Association
University Singers
Society for Advancement of Management

A Club of the Year Award is annually presented to that student organization which most clearly exemplifies the University spirit, through educational and social activities for club members and the University community. Winner of the Award for the past three years has been the Physical Therapy club.

ATHLETICS

The University is a Division III member of the National Collegiate Athletic Association (NCAA), the Middle Atlantic States Collegiate Athletic Conference (MAC), and the Eastern College Athletic Conference (ECAC).

MEN'S VARSITY SPORTS	
Basketball	Cross Country
Baseball	Golf
Tennis	Soccer
Wrestling	Hockey
Swimming	Lacrosse

WOMEN'S VARSITY SPORTS	
Field Hockey	Softball
Tennis	Cross Country
Basketball	Soccer
Volleyball	Swimming

A WINNING TRADITION

University athletic teams—The Royals and Lady Royals— enjoy success in nearly all sports. Particularly noteworthy are the men's and women's soccer and basketball teams, who perennially are selected for NCAA post-season competition. The Royals have won the Division III basketball title twice (1976 and 1983) and finished second in 1988; the Lady Royals won the basketball title in 1985 and finished third in 1987. During the past five years, four men's soccer players (Dan Diceanu, 1984; Jeff Arestivo, 1986; and Mike Capasso and Magnus Ojert, 1988) and two men's basketball players (Bill Bessoir, 1984, 1985; and J.P. Andrejko, 1987, 1988) have been named Division III All Americans. Three Lady Royals basketball stars (Deanna Kyle, 1985; Una Espenkotter, 1986; and Shelley Parks, 1987) have gained this honor.

The 1987-88 year also produced a number of individual sports heroes: Middle Atlantic Conference wrestling champion Dennis Udicious, cross country runner Chris Heaton, swimmer Cathy Hadley, and golfer Will Carey III, all of whom qualified for their respective NCAA National Championship competitions. Carey was named an All American.

ACADEMIC ALL AMERICANS

The Scranton tradition combines excellence in the classroom and on the playing field. It is personified especially by a large number of students who in recent years have achieved Academic All American honors: Mickey Banas (1983, 1984), Dan Polachek (1985), and J.P. Andrejko (1987, 1988), men's basketball; Theresa Meade (1984, 1986), cross country; Mike Capasso (1988), men's soccer; Cathy Graham (1985, 1986), Lori Synder (1985, 1986), and Sue Cately (1988), women's soccer; Shelly Buntz (1986, 1987), women's basketball; Greg Moro (1986), baseball; Tracy Graybill (1987), women's tennis; Kelly Guiton (1987), softball; and Will Carey III (1988), golf.

In the past five years, six University graduates mentioned in these pages (Banas, Polachek, Espenkotter, Snyder, Andrejko and Carey) have won prestigious NCAA Post-Graduate Scholarships. No other institution in the country has produced as many recipients.

INTRAMURALS AND PHYSICAL EDUCATION

A year-long intramural program is in operation in the John J. Long Center and the new William J. Byron Recreation Complex, as well as outdoors. For the additional sports available in the Physical Education program, see the description given in the Departmental listing earlier in this bulletin.

J.P. Andrejko, All American, NCAA Post-Graduate Scholarship Winner

STUDENT SERVICES

STUDENT AFFAIRS PERSONNEL—The Vice-President, in cooperation with his staff members, directs the various student services, plans and coordinates all activities and services in non-instructional areas: e.g., housing, health, activities, food services, placement. The Dean of Students has a special responsibility for assisting students in the Residence Halls and providing assistance in the area of student conduct.

Fr. Tom Masterson, S.J.
Director of Campus Ministries

CAMPUS MINISTRY—As a Catholic institution, the University of Scranton is dedicated to promoting continued growth in personal maturity and freedom, especially as religious believers and persons dedicated to service of the human family. The specifically spiritual ministry of the entire University community is coordinated by the office of Campus Ministries assisted by the Jesuits, other clergy, University staff members and students themselves.

Frequent daily and Sunday liturgies and other special services are conducted in the Madonna della Strada chapel and in dormitories in which the community both expresses and deepens its religious vision. Spiritual counseling is available from the staff or Jesuits, especially the Dormitory Counselors. These make available their training, experience and friendship to promote greater self awareness, maturity, integration and ability to pray, as well as to identify obstacles to these and other goals.

Persons seeking a period of stillness, directed prayer or an experience of Christian community are invited to participate in frequent programs at nearby Chapman Lake. Campus Ministries also sponsors lectures and discussions on vital issues, organizes special events to heighten religious awareness, assists in services to the larger community and is responsible to act as spokesman for justice within the University. Students of non-Catholic faiths are encouraged to help plan an expansion of services to themselves.

COUNSELING CENTER—The Counseling Center serves all students of the University in the personal and interpersonal dimensions of their lives. Located on the second floor of the Gallery building, the Center offers individual and group counseling, and it serves as a liaison with other offices and agencies (both on and off campus) regarding academic, career, and health-related concerns. In addition, the Counseling Center offers outreach programs to enhance the lives of students and to reduce impediments to their achieving their full potential.

The Counseling Center staff includes members licensed by the Commonwealth of Pennsylvania to practice clinical psychology. Interviews are on a voluntary basis and are without charge to the student. The Center is open Monday through Thursday from 8:30 a.m. to 9:00 p.m. and Friday from 8:30 a.m. to 5:30 p.m.

ACADEMIC ADVISING CENTER—The Academic Advising Center, located in 309 St. Thomas Hall, serves all freshmen in the College of Arts and Sciences and the College of Health, Education, and Human Resources. Staffed by faculty advisors from a wide variety of disciplines in both colleges, the Academic Advising Center offers a comprehensive program of academic advising throughout the freshman year. In addition to individual advising, the Academic Advising Center also offers group advising for students in each major and specialized advising seminars for students in the general areas of Humanities, Natural Science, and Social Science. Faculty advisors are available to students from 8:00-4:30 Monday through Friday; they provide assistance with preregisteration, drop-add, general education course selection, declaration of major (for general area studies students), and assessment of academic performance and goals.

SOM ADVISING CENTER—Located in O'Hara 409, the School of Management Advising Center is open between the hours of 8:30 and 4:30. This Advising Center runs a year-long program designed to assist field-declared business students select a major by the end of the freshman year. It also advises all SOM freshmen and sophomores.

THE LEARNING RESOURCES CENTER—The Learning Resources Center is located in 562, 563, and 575 St. Thomas Hall. The LRC was established to help students accomplish their academic goals at the University. The LRC provides services to supplement those offered in the classroom. The Center is staffed by professional staff, graduate assistants, and peer tutors. LRC staff, utilizing individualized, group, and computer-assisted instruction, provide assistance with oral and written communication skills, study skills, critical thinking skills, academic evaluation and remediation, and study help in specific courses. Assistance is available on a drop-in or referral basis.

READING CLINIC—To assist students in correcting reading weaknesses and improving proper skills, the University's Reading Clinic, under the direction of Prof. John Williams, is made available. A non-credit Developmental Reading course is offered. It concentrates on such areas as comprehension, word attack, speed, critical reading and analysis, research and study techniques. There is a $75 fee.

OFFICE OF CAREER SERVICES—The office has designed a program of services which is available to all students and alumni. These services are maintained to advise students on career development, to assist in securing employment and to help plan further academic work following graduation. The Career Services Office conducts the corporate employment interview program for seniors, administers the accounting and federal government internship programs, and helps in locating off-campus part-time employment. During the academic year, the office presents workshops on resume/interview preparation and career planning.

Through the Director, Mr. Paul Perhach, and the departmental advisors, students are provided with graduate and professional school counseling in the areas of admissions, test deadlines, financial aid, and other pertinent information. Letters of recommendations for students and alumni are typed and sent to graduate and professional schools.

CONCERT AND THEATRE SERIES

The University annually presents a variety of cultural events through its Concert and Theatre Series, under the direction of Dr. Njegos Petrovic. Recent presentations have been marked by a high quality of artistic expression by companies of national and international acclaim: "Tosca," presented by the Goldovsky Grand Opera Theatre of New York; Ars Antiqua de Paris; the Pennsylvania Ballet from Philadelphia; the African Heritage Dancers and Drummers of Washington, D.C.; the Ballet Folclorico of Mexico; famed exiled Soviet violinist Albert Markov; Jury's Irish Cabaret of Dublin; the Alberni String Quartet from London; Singers and Dancers of Madrid with the Grandio Spanish Lute Orchestra; the Slovak State Folk Ensemble from Bratislava, Czechoslovakia (see below); and "Romeo and Juliet," by the National Shakespeare Company of New York.

Admission Expenses Financial Aid

Redington Hall, Student Residence

The University of Scranton is a selective institution in the Jesuit tradition. It makes available to qualified students an excellent education at a reasonable cost, and it offers significant programs of financial aid.

ADMISSION

The Admissions Committee of the University of Scranton will make the final decision on applications for admission. In reaching this decision, the committee will consider a number of factors:

Demonstrated evidence of a student's academic ability, intellectual curiosity, strength of character and motivation.

Student's high school record, rank in class and extracurricular activities.

Scholastic aptitude test scores and recommendations.

STEPS IN MAKING APPLICATION

Request for an application form and all correspondence dealing with admission to the College of Arts and Sciences, the College of Health, Education, and Human Resources or the School of Management should be directed to:

THE DEAN OF ADMISSIONS
UNIVERSITY OF SCRANTON
SCRANTON, PENNSYLVANIA 18510
Telephone: (717) 961-7540.

A non-refundable fee of $30.00 should accompany the application.

Students should apply during the first semester of their senior year of high school. July 1 is the final date on which applications for Fall term admission will be accepted.

The first two parts of the application form should be completed and the entire form given to the principal or guidance counselor of the high school who will forward high school grades and the completed form to the University.

The Scholastic Aptitude Tests are required of all applicants. These tests should be taken during junior year and/or in November, December or January of senior year. Achievement Tests are not required. Arrange for these tests by contacting your high school guidance counselor or by writing to: The College Entrance Examination Board, Box 592, Princeton, New Jersey 08540.

A non-refundable class reservation fee of $100.00 is required of all accepted applicants. In addition, accepted resident freshmen will make a non-refundable room deposit of $100.00 upon notice from the Dean of Admissions.

The University of Scranton is a Catholic, Jesuit educational institution serving men and women, and is committed to equal opportunity in employment and education for all persons without regard to race, color, creed, ancestry, sex, national origin, handicap, or age.

REQUIRED HIGH SCHOOL PREPARATION

Students desiring to enroll in any of several undergraduate programs offered by the University must have completed a total of 16 or more high school academic units covering grades 9-12. The term "unit" means a high school course taught four or five hours weekly throughout an academic year of 36 weeks duration. Unit requirements and preferred distribution of secondary courses are given in the following table:

HIGH SCHOOL UNITS	COLLEGE PROGRAM CHOICE					
	Arts		Science or Engineering		Business, Education or Social Science	
	Req.	*Pref.*	*Req.*	*Pref.*	*Req.*	*Pref.*
English	4	4	4	4	4	4
History & Social Science	2	3	2	3	2	3
Foreign Language	2	2+	2	2+	2	2+
College Preparatory Mathematics	3	4	4	4	3	4
Science	1	2+	3	3+	1	2+
Other acceptable units	4		1		4	
TOTAL	16+		16+		16+	

Applicants without high school credit in modern languages may be accepted if they present 16 acceptable units. A single year of language in high school will not be counted as a unit to satisfy the requirements for admission.

Mathematics include elementary, intermediate, and advanced algebra, plane and solid geometry; trigonometry, analysis, and any other college preparatory course. Applicants for science and engineering programs must include trigonometry and must have maintained an 85% average in each mathematics course. Applicants for the nursing programs should included chemistry and biology in their high school program.

Science includes biology, chemistry, physics, and other college preparatory courses. Pre-engineering applicants are urged to include physics in their high school preparation.

ACCELERATION AND ADVANCED PLACEMENT

Applicants who have taken college level courses may be given advanced placement or advanced placement with credit for these courses. Students who have been accepted for admission and desire to apply for such placement must take the Advanced Placement Examination offered in May by the College Entrance Examination Board, Princeton, New Jersey 08540. Ordinarily a score of "3" or better in this examination will insure advanced placement with credit.

COLLEGE LEVEL EXAMINATION PROGRAM

Through the CLEP tests, applicants may gain college credit in most academic subjects for work done outside the classroom in jobs, military service, etc., or in non-accredited institutions. For further information contact: College Level Examination Program, Box 1824, Princeton, New Jersey 08540. Students wishing to be considered for CLEP credits should take the CLEP examinations and have the results forwarded to the Dean of Admissions.

ACADEMIC DEVELOPMENT PROGRAM

Applicants who fail to meet all of the admission requirements may be considered for a special freshman year Academic Development Program concentrating on English, logical thinking, reading skills, study habits, as well as work in the student's major field. Satisfactory completion of the ADP program will insure the student normal sophomore standing.

TRANSFER STUDENTS

Students who wish to transfer to the University must submit an application and the usual credentials (official high school record, SAT scores and transcript(s) from the college(s) attended). At the discretion of the Admissions Committee, students from another accredited college may be admitted provided: (1) The courses to be transferred are equivalent to courses offered at the University of Scranton; (2) the academic average of the candidate is (2.5) "C plus", (3) certification of honorable

dismissal is presented from the previous college. No credit will be given to courses with grades less than "C". Students transferring from other institutions shall be required to make up curricular subjects prescribed in the course which they are to follow at the University of Scranton. A minimum of 63 credits at the University of Scranton is required of transfer students for degree eligibility. Special orientation sessions are held for transfer students. It should be noted that some departments require that at least half of the credits in the student's major be taken here at the University. The respective Dean should be contacted.

HANDICAPPED STUDENTS

The University of Scranton's Handicapped Policy is *not to deny otherwise academically* qualified handicapped persons a college education by virtue of their handicap. To this end, the University requires that the handicapped person, *first,* undertake a good faith effort to apply for and obtain funding for the auxiliary aid(s) though state vocational rehabilitation agencies; private associations, through other federal, state, and local government sources, and through volunteer funding sources whenever possible. The University will assist the handicapped individual in applying for such funds. *Second,* if these resources are insufficient for an individual, the University will provide essential assistance within available University resources and funds. *Third,* in the latter instance, the University reserves the right to require the handicapped individual to submit medical proof of handicap, or, at the Unviersity's expense, to undergo a medical examination, showing need for the auxiliary aid. The Director of the Counseling Center maintains and provides handicapped information, coordination, referral and counseling services for handicapped students. She may be reached in the Gallery building, room 221; phone (717) 961-7620.

STUDENT EXPENSES

ACADEMIC YEAR 1988-89

TUITION per credit (Day School) $212.00

ORDINARY FEES

University Fee per semester 170.00
The University Fee is applied as follows:
- Student Center Membership Fee $40.00
- Athletic Fee 30.00
- Student Activity Fee 15.00
- Student Government Activity Fee 20.00
- Rec. Complex Membership Fee 50.00
- Computer Equipment Fee 15.00

Continuation Fee (in lieu of University Fee for students not in residence) per semester 5.00
Medical Leave Fee per semester 15.00
Reader (Individual Study) Fee, per credit 15.00
Breakage Fee ..... Actual

FOR SENIORS ONLY
Commencement/Yearbook Fee $105.00

FRESHMEN/TRANSFERS
Orientation Fee $60.00
I.D. Photo 5.00

LABORATORY FEES

Science Departments
- Biology, Physics labs, per course, per semester 60.00
- Psychology, per course, per semester 45.00
- Chemistry, per hour, per semester 30.00
- Medical Technology Internship Fee, per semester 125.00

English/Communication Departments
- Film Screening Fee, per course, per semester 40.00
- Radio Lab, TV Lab Fee, per course, per semester 35.00

Foreign Language Department
- Language Lab Fee, per course, per semester 25.00

Nursing and Physical Therapy Department
- Clinical Lab, per hour, per semester 25.00

Liability Insurance, per year (Psychology, Nursing, Physical Therapy) 15.00
Assessment Fee (Nursing—Jr./Sr.) 20/30

Computer Use Fee (Any Department)
- High Use Courses, per course, per semester 40.00
- Moderate Use Courses, per course, per semester 15.00

Fine Arts Department
- Painting Course Lab Fee, per course, per semester 35.00
- Music Course (where indicated) Fee, per course, per semester 15.00

SPECIAL SERVICE FEES

Late Registration Fee 20.00
Requested Change of Schedule after First Day of Class 15.00
Change of Major Fee 15.00
Certified Transcript (per copy)
- Currently Matriculated Students 2.00
- All Other Requests 4.00

Application 30.00
Parking Fee, annual 50.00
Locker Rent, per year 10.00
Reading Clinic, per course 75.00

FOR RESIDENT STUDENTS ONLY—ROOM & BOARD

Room Rent (per semester)—Redington Hall	$995.00
Room Rent (per semester)—off campus residences	930.00
Room Rent (per semester)—other residences	900.00
Food Program, 19 meal plan (per semester)	765.00
Food Program, 14 meal plan (per semester)	705.00
Food Program, 10 meal plan (per semester)	600.00
Health Service Fee (per semester)	30.00

Incoming resident students are required to pay a $25.00 room damage fee. The room damage fee will be paid only once by each resident student and will be refunded in full (or part if any claims are made against the fee) upon the student's graduation or official withdrawal from school.

Fees listed for residence facilities do not cover the times of calendar vacations. Students are expected to vacate their rooms at these times.

A resident student participating in an internship or clinical experience during the academic year must pay room fees for the entire year. A student involved in such an internship/clinical experience for an entire semester will not be charged room fees for that semester provided the Student Affairs office is notified in writing of a room cancellation at least one month before the semester in question.

TUITION PAYMENTS

Tuition and fees are payable in advance upon registration. Registration is to be completed BY MAIL in July for the fall semester and in December for the spring semester. Without exception, the Laboratory Fee must be paid in all courses having a laboratory requirement.

For freshmen only, a partial tuition payment of $1,000, or one half of net fall tuition charges after application of estimated financial aid, whichever is less, will be due upon receipt of an itemized statement in mid-June.

No student shall be permitted to receive any degree, certificate, or transcript of record until the financial account with the University has been settled.

FAMILY TUITION REDUCTION

Whenever two or more dependent children from the same family are in attendance during the same semester at the University as full-time undergraduate students, the family tuition reduction policy will apply. Also, whenever at least one dependent child in a family is in attendance at the University as a full-time undergraduate student, the family tuition reduction policy will apply for a parent enrolled in *Dexter Hanley College.* The amount of Tuition Credit that will be awarded each semester for each student will be calculated after other financial aid has been applied by Treasurer's Office personnel. Forms and additional information may be obtained from the Treasurer's Office.

MONTHLY PAYMENTS

The University does not accept installment payments directly, but does facilitate this arrangement through three professional agencies: Academic Management Services, 1110 Central Avenue, Pawtucket, Rhode Island 02861; EFI Fund Management Corporation, 2700 Sanders Road, Prospect Heights, Illinois 60070; and Tuition Plan Inc., Concord, New Hampshire 03301. Brochures are mailed to parents of all incoming students in May of each year.

VISA and Master Card use is available for tuition and fee payments. Please contact Treasurer's office for details.

Collegiate Hall in Redington Hall

REFUNDS

If a student is authorized to withdraw with honorable standing from the University for a good cause, a written request may be made for reduced charges for tuition, board and room fees. (Note should be taken that the student may not demand a refund as a matter of right.) Ordinarily, laboratory and special service fees are not refundable. Students withdrawing from individual courses are also eligible to receive credit on their account with the University according to the schedule given below.

SCHEDULE OF REFUNDS	CREDIT
FALL/SPRING SEMESTER	
Before the first day of classes and to and including 9 calendar days after classes begin	100%
To and including 16 calendar days after classes begin	75%
To and including 23 calendar days after classes begin	50%
To and including 31 calendar days after classes begin	25%
Beyond 31 days after classes begin	no refund

HEALTH INSURANCE

The University offers each of its undergraduate students the opportunity to enroll in an attractive health insurance plan at the outset of each academic year. All students residing in University housing units must participate in the University's sponsored health program, unless written evidence is presented showing coverage under another health program (e.g. parent's health policy).

SCHOLARSHIPS AND FINANCIAL AID

The University desires to help as many qualified students as possible to complete a college education. For this purpose the University maintains an Office of Financial Aid and all inquiries concerning such assistance should be made to the Director of Financial Aid.

PROCEDURES FOR APPLYING FOR SCHOLARSHIPS AND FINANCIAL AID

1. Submit the University applications for Scholarships and Financial Aid.
2. Complete the Financial Aid Form and forward to the College Scholarship Service before February 15th. The University code number is 2929. Copies of the Financial Aid Form can be obtained from the Financial Aid Office.

Ordinarily, to be eligible for financial aid, a student must be classified as full time, i.e., carrying a minimum of 12 credits per semester. Aid may be renewed provided the student is in good academic standing, i.e. has a QPI of 2.0 or above and has earned 27 credits for the year. (Some scholarships require a QPI of 3.0 in order to be considered for renewal.)

The following financial aid programs are available:

LOANS:

The University administers the National Direct Student Loan Program. The Financial Aid Form is required of all loan applicants.

Most states operate a Guaranteed Student Loan Program in cooperation with lenders (banks, credit unions, savings and loan associations).

Applications must be secured by the borrower from the lender annually. For full-time undergraduate students, an annual maximum of $2,500 is permitted. The overall maximum for undergraduate study is $12,500.

OTHER PROGRAMS:

THE PENNSYLVANIA HIGHER EDUCATION ASSISTANCE AGENCY has been designated by the General Assembly to administer the **State Grant Program.** A graduating high school senior may be awarded from $100 to $1650 per year. Interested students should consult with their high school guidance counselor for full details and eligibility requirements.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANTS, formerly Educational Opportunity Grants, established under the Higher Education Act of 1965 are awarded from federal funds through the college; amounts may range from $200-$2,000 per year to students from low income families. The Financial Aid Form is required for this program.

THE PELL GRANT (formerly Basic Opportunity Grant) has been established under Title IV, Part A of the Educational Amendments of 1972. Applications are available from Institutions of high education, high schools, libraries, post offices, and other locations easily accessible to students.

THE COLLEGE WORK-STUDY PROGRAM established under the Economic Opportunity Act of 1964 provides a number of jobs on campus during the summer and academic year for students demonstrating a high degree of financial need. The Financial Aid Form is required of all applicants for this program.

VETERANS READJUSTMENT ACT OF 1966—Veterans should consult with their local V.A. counselor in order to establish their eligibility for participation.

U.S. ARMY ROTC SCHOLARSHIPS are available. Full details may be secured by contacting the Military Science Department.

THE BUREAU OF VOCATIONAL REHABILITATION under the Pennsylvania Department of Labor and Industry provides help to qualified students. Eligibility requirements should be discussed with local service office.

CAMPUS EMPLOYMENT—In addition to jobs under the Federal College Work-Study Program, the University annually provides a number of jobs in various departments and administrative offices for qualified students. Students seeking campus employment must file the Financial Aid Form.

SCHOLARSHIPS:

Each year the University offers a variety of scholarships which range from full tuition Presidential Scholarships for outstanding high school seniors to partial scholarships which are granted on the basis of the student's scholastic ability and financial need. The University of Scranton participates in the College Scholarship Service and all applicants for scholarship aid must file a copy of the Financial Aid Form.

SCRANTON PREPARATORY SCHOOL SCHOLARSHIP

This four-year tuition scholarship, initiated in 1947 by the President and Board of Trustees of the University, is given annually to a graduate of the Scranton Preparatory School in honor of the following (the name of the scholarship, therefore, rotates from year to year):

THE MOST REV. HENRY T. KLONOWSKI SCHOLARSHIP (1985-1989)
—to Elisa M. Sottile.
THE MOST REV. EDWARD BAXTER, S.J. SCHOLARSHIP (1986-1990)
—to Kristen M. Robson.
THE MOST REV. MARTIN J. O'CONNOR, D.D., SCHOLARSHIP (1987-1991)
—to Kathleen B. McHugh
THE MOST REV. RAYMOND A. LANE, D.D., SCHOLARSHIP (1988-1992)
—to Eric A. Baker

Selection of the recipient is on the basis of academic achievement, qualities of leadership, service to the Preparatory school, and recommendation of the President and Dean of Studies of the Preparatory School.

PRESIDENTIAL SCHOLARSHIPS

Annually, the University names five *Presidential Scholarships* in honor of distinguished alumni, friends of the University, and citizens of the Scranton area. The scholarships are presented to students with outstanding high school records. The *Presidential Scholarships* have been made possible by University support through unrestricted funds.

The names of the *Presidential Scholarships* and the recipients for 1985-89 are:

THE FRANK A. CIMINI SCHOLARSHIP—to William A. Bulman of Hatboro, Pennsylvania (Upper Moreland High School).

THE MONSIGNOR JOHN M. DOUGHERTY SCHOLARSHIP—to Harold F. Jenkins of Nanticoke, Pennsylvania (John S. Fine High School).

THE LOUIS C. KLEFF, S.J. SCHOLARSHIP—to Mark A. Miller of Bensalem, Pennsylvania (Bishop Egan High School).

THE SONDRA G. MYERS SCHOLARSHIP—to Tracey E. Obeda of Old Bethpage, New York (St. Anthony's High School).

THE HONORABLE DANIEL L. PENETAR SCHOLARSHIP—to Janet E. Sensenig of Parkesburg, Pennsylvania (Coatesville Area Senior High School).

The names of the *Presidential Scholarships* and the recipients for 1986-90 are:

THE EUGENE A. CURTIN, M.D., SCHOLARSHIP—to Matthew J. Gibbs of Barnesville, Pennsylvania (Marian High School)

THE THOMAS F. FITZPATRICK SCHOLARSHIP—to James A. Rafferty of Scranton, Pennsylvania (Scranton Preparatory School).

THE MONSIGNOR CHARLES W. HEID SCHOLARSHIP—to Rahat J. Quli of Mountaintop, Pennsylvania (MMI Preparatory School).

THE EDWARD POPIL SCHOLARSHIP—to Donna M. Shaw of Scranton, Pennsylvania (Scranton Central High School).

THE ROBERT F. PUGLIESE, ESQ., SCHOLARSHIP—to Judith A. Dougherty of Scranton, Pennsylvania (West Scranton High School).

The names of the *Presidential Scholarships* and the recipients for 1987-91 are:

THE EDWARD F. BARTLEY SCHOLARSHIP—to Karen M. Burns of West Chester, Pennsylvania (Bishop Shanahan High School).

THE CHARLES G. GONZALEZ, S.J., SCHOLARSHIP—to Jennifer Gruenloh of Glen Lyon (John S. Fine High School).

THE JOHN J. HAGGERTY SCHOLARSHIP—to Eugene P. McGarry of Moosic, Pennsylvania (Scranton Preparatory School).

THE JOSEPH A. QUINN, ESQ., SCHOLARSHIP—to Joseph F. Murray of Moosic, Pennsylvania (Scranton Preparatory School).

THE THOMAS E. SHERIDAN SCHOLARSHIP—to Thomas H. Griffiths, Jr. of Conklin, New York (Susquehanna Valley High School).

The names of the *Presidential Scholarships* and the recipients for 1988-92 are:

THE THOMAS F. GLEESON, S.J., SCHOLARSHIP—to Amy P. Haher of Johnson City, NY (Johnson City Senior High School).

THE SISTER WILLIAM JOSEPH, RSM, SCHOLARSHIP—to Felice Piazza, West Islip, NY (West Islip High School).

THE ARTHUR J. KANIA, ESQ. SCHOLARSHIP—to Michael L. Molineux, Drexel Hill, PA (Monsignor Bonner High School).

THE ROBERT T. KELLY, CPA, SCHOLARSHIP—to Brian P. Loftus, Moscow, PA (Scranton Preparatory School)

THE ROBERT T. RYDER SCHOLARSHIP—to Cara J. Kelly, Norristown, PA (Bishop Kenrick High School).

PIUX X SEMINARY SCHOLARSHIP

Dr. Arthur Jordan has initiated the Rev. James Flynn '58 Memorial Scholarship for the purpose of assisting University of Scranton students at Piux X Seminary in need of financial aid.

PURPLE CLUB SCHOLARSHIPS

Noteworthy among gifts to University of Scranton students are the significant amounts annually contributed by the Purple Club of Scranton. Since its founding in 1933, Purple Club contributions have totaled over $350,000.

ENDOWMENT

The University Endowment welcomes gifts of funds or property from alumni, parents of students, and other persons interested in the support of higher education.

Generally, the principal of an "endowment" is non-expendable. Income earned by investment of the endowment may be used for scholarships, awards, academic chairs, maintenance of buildings or other purposes specified by donors.

Some endowments are established by bequest through wills. Charitable Trusts and insurance programs, in more than a dozen variations, also provide a significant source of endowment funds, with the added feature of a life income for the donor. Outright gifts of highly appreciated securities or other property constitute another source of endowment funds.

Those interested in learning more about the cost and tax advantages of establishing a scholarship or other memorial, should contact:

Robert J. Sylvester
Vice President for Development
(717) 961-7661

John J. Burns, S.J.
Director of Deferred Giving
(717) 961-7661

FUNDED SCHOLARSHIPS

BURKE FAMILY SCHOLARSHIPS—In 1966 and 1967, contributions were made to the Scholarship Endowment Fund of the University in the name of the Burke Family Foundation. In prior years, additional unrestricted gifts have been made by the Burke Family Foundation. The income from the fund is used to provide scholarships for needy and deserving students. The Burke family was originally from the Hyde Park section of Scranton. Thomas F. Burke, Class of '09, played a leadership role in founding the scholarship.

REV. HENRY J. BUTLER, S.J., MEMORIAL SCHOLARSHIPS—The first was established in 1984 by James Summers in honor of the Executive Vice President of the University who died in office in 1981. A second Butler Scholarship was established in 1985 by John A. McCrane, a classmate of Father Butler at Georgetown University.

BRIDGET CARNEY SCHOLARSHIP—This Fund was established in 1972 by a bequest of James I. Kearney, M.D. Income from the fund, which is named to honor the memory of Dr. Kearney's mother, is used for scholarships for students, one or both of whose parents were or are parishioners of St. Ignatius Parish, Kingston, Pennsylvania.

JAMES J. CLAUSS SCHOLARSHIP FUND—Established in 1973 by an alumnus, Class of '47, and local businessman, this fund provides investment income to aid students who require financial assistance, but do not qualify for most scholarship programs based on financial need. First consideration is given to Northeastern Pennsylvania students.

JON A. CLAUSS SCHOLARSHIP FUND—A Scholarship Endowment was established in 1980 to honor the memory of Jon A. Clauss, son of Dr. and Mrs. Thomas F. Clauss of Justus, Pa. Income from the endowed scholarship is distributed to deserving young men and women by the University's Financial Aid Office.

ROBERT I. EDELSOHN SCHOLARSHIP FUND—In 1964 a sum was bequeathed in the Estate of Robert I. Edelsohn, a Polish immigrant who became a Scranton businessman and realtor, to be held in trust by the University of Scranton. Income from the fund is used to furnish scholarships for deserving students at the Universtiy, who "without such assistance, might not be able to obtain the advantage of a college education."

THE MARTHA FITCH SCHOLARSHIP FUND—In 1955 a bequest was made to the University in the Will of Miss Martha Fitch, a retired nurse and former superintendent of Thompson Hospital, Scranton. Income from this fund is used to provide scholarships for needy and deserving students.

THE SARA G. FRIEL MEMORIAL SCHOLARSHIP FUND—Before her death in 1982, Sara G. Friel, aunt of then University President, Wiliam J. Byron, S.J., directed that part of her estate be used to endow a scholarship fund at the University of Scranton. Income from the Fund is distributed to deserving and financially needy students each year by the Director of Financial Aid.

THE LEN AND DEBORAH GOUGEON ST. ANN'S SCHOLARSHIP—Established in 1986 through a gift from Drs. Len and Deborah Gougeon. This award, based on need, will provide assistance to a graduate of St. Ann's Grammar School or a member of St. Ann's Monastery Parish, Scranton, PA.

ROSE GRESS SCHOLARSHIP FUND—Mr. and Mrs. Edward Gress in 1982 established this fund through a trust agreement with the University. Income from the trust is applied toward the expenses of a deserving student. First preference for the award is given to students who are residents of the Scranton area.

THE EDWARD T. GRONCKI SCHOLARSHIP—Established to honor the memory of a University of Scranton alumnus, the scholarships are awarded to deserving young men and women selected by the Director of Financial Aid. First consideration is given to residents of the Minooka and Greenwood sections of Northeastern Pennsylvania. The late Attorney Groncki was, at the time of his death, the leading independent specialist in mutual funds and tax shelters in the Washington, D.C. area. His support, during life, of numerous projects to aid young people, led to the creation of the scholarship by family members and close friends.

RUTH GUNSTER MEMORIAL FUND—In 1971, Joseph F. Gunster, Class of '71, established the Ruth H. Gunster Memorial Fund in loving memory of his wife. This fund, which was increased by a bequest in 1980, is invested and the income is used for scholarships given annually to students from Northeastern Pennsylvania.

JUDGE FREDERICK W. GUNSTER SCHOLARSHIPS—The Estate of Joseph F. Gunster also provided funds for this scholarship to honor the memory of his father. Awards are made on the basis of merit.

MARGARET GUNSTER SCHOLARSHIPS—Joseph F. Gunster's mother is remembered through a scholarship fund designed to assist students from low income families. This fund was also established by Mr. Gunster's bequest.

THE JOHN AND LUCILLE GUZEY SCHOLARSHIP—An endowed scholarship by Mr. and Mrs. John Guzey was begun initially in 1978 and added to in 1983. Originally developed to assist members of the Central Scranton Boys' and Girls' Clubs, this fund is now unrestricted and is awarded on the basis of financial need.

THE DERMOT HARRIS FOUNDATION—The Dermot Harris Foundation will support promising young men and women from the Republic of Ireland. This Foundation was started in 1987 by actor Richard Harris in honor of this brother Dermot.

ITT SCHOLARSHIP FUND—The International Telephone and Telegraph Corporation established this scholarship fund to encourage students to pursue academic excellence. The Dean of Admissions annually selects an incoming freshman to receive the award, which is renewable based on academic achievement.

THE JESUIT COMMUNITY SCHOLARSHIP FUND—Substantial annual gifts from the University of Scranton Jesuit Community have made possible an endowment to provide unrestricted scholarship aid to deserving students. Most awards are based on financial need and academic achievement.

THE JETHRO SCHOLARSHIP—Funded with an endowment established by a University of Scranton faculty member, Dr. Everett R. Brown, the grant is awarded to a freshman Management, Marketing or Economics/Finance major who demonstrates that he or she has earned a significant amount of total college expenses. It is not dependent upon financial status of parents, nor high school grades. The grant may be repeated throughout the period of undergraduate study, as long as the recipient maintains a grade point average of 3.00 or better.

THE FRANCIS J. KEARNEY SCHOLARSHIP FUND—A 1977 gift from a retired pharmacist, followed by a bequest in 1979, made possible this Scholarship Fund to assist deserving students in need of financial aid.

KOCH-CONLEY AMERICAN LEGION SCHOLARSHIP—Established in 1985 by agreement with the American Legion, these scholarships are provided on the basis of academic achievement and financial need. First preference for these awards is given to sons, daughters, nieces, nephews and grandchildren of the members of the Koch-Conley American Legion Post 121. Thereafter, similar family members of other Pennsylvania American Legion Post members may be considered.

REV. STEPHEN A. KOLLAR MEMORIAL SCHOLARSHIP FUND—A fund was established in 1977 in accordance with directions set forth in the Will of the late pastor of Holy Family Church, North Washington Ave. at Gibson St., in Scranton. A maximum of $500 per year is made available to each recipient. Applications must be considered in the following priority: 1) Kinship to the deceased, the Rev. Stephen Kollar; 2) members of the Holy Family Parish Congregation of Scranton for a minimum of three years prior to filing the application. In the event that there are no eligible candidates in categories (1) and (2), other needy students may be considered.

KUEHNER SCHOLARSHIP FUND—This fund was established by Carl, class of '62, and Joanne Kuehner of New Canann, CT in 1985. Income from this fund provides financial assistance to needy students from single parent families in Lackawanna County.

THE WILLIAM V. LOUGHRAN AND ALBERT E. PETERS SCHOLARSHIP FUND—Established in 1985 through a gift of Albert E. Peters and Elizabeth Loughran Peters, this fund provides awards, based on merit and need, to seniors who intend to pursue graduate studies in the fields of science, chemistry, and medicine. The fund is to be open-ended so that members of the Loughran and Peters families may continue to contribute to the scholarship, increasing its value through the years to benefit additional University students.

THE ROBERT L. McDEVITT SCHOLARSHIP—Income from a Fund established in 1977 provides scholarship assistance to qualified and deserving Hanley College students. The scholarship was established by Robert L. McDevitt, a Georgetown University classmate and long-time friend of the late Rev. Dexter L. Hanley, S.J., who served as president of the University from 1970 to 1975.

CHARLES E. MERRILL SCHOLARSHIPS—In 1969, the Charles E. Merrill Trust of New York City made a gift to the Scholarship Endowment Fund of the University. The income from this endowment is awarded for scholarship assistance to students of the Catholic faith.

THE ANGELO H. MONTRONE SCHOLARSHIP FUND—This fund was established by Paul M. Montrone, President of the Henley Group, Inc. and a member of the class of 1962, to honor his father. Each year, the Director of Financial Aid awards a scholarship to a School of Management student who best exemplifies the senior Mr. Montrone's life-long dedication to self-improvement and ethical behavior in business management.

THE MURPHY SCHOLARSHIP FUND—This fund was established in 1957, through bequest of Miss Margaret Murphy, a retired schoolteacher and lifelong resident of Scranton. A marker has been placed on campus designating the gifts as having been made by Margaret and her sister Katherine "in loving memory of our mother, father and brothers." The income of this fund is used to provide scholarships for needy and deserving students.

THE NEPA APICS SCHOLARSHIP—Established in 1987 by Northeastern Pennsylvania Chapter of the America Production and Inventory Control Society for qualified junior or senior students enrolled in the Production Management major of the School of Management and/or active members of the University of Scranton Chapter of APICS.

THE RAYMOND S. O'CONNELL SCHOLARSHIP—Shortly before his death in late Spring of 1981, an alumnus of St. Thomas College, Raymond S. O'Connell, established a fund for students who otherwise might not be able to attend college. His sister, Sara E. O'Connell, completed the gift after Raymond's death.

THE MARIAN N. AND PATRICK F. O'HARA SCHOLARSHIP—Income from an endowment provides unrestricted scholarship grants to deserving young men and women. Selection of recipients is made by the University Financial Aid Office.

THE FRANCIS E. AND ELIZABETH BRENNAN REDINGTON SCHOLARSHIP FUND—This fund was established in 1984 according to provisions in the will of the late Francis E. Redington. It provides financial assistance to students on the basis of both ability and need. Some portion of the income each year supports scholarships for students from the Republic of Ireland.

ERNEST D. PREATE SCHOLARSHIP FUND—The family of Attorney Ernest D. Preate, Sr. established a scholarship fund in March 1982. Income earned by the Fund is distributed to deserving students. Selections of the student beneficiaries is made by the Director of Financial Aid, in consultation with the Treasurer and Dean of Admissions. First consideration is given to needy students who are residents of Lackawanna County.

JOHN M. ROBINSON SCHOLARSHIP FUND—An initial gift in 1974 and additional yearly gifts have established a fund which is used to generate scholarship income for promising and deserving students. Scranton area residents receive first consideration. Mr. Robinson attended the University and subsequently established a business in Newark, N.J.

THE JOSEPHINE SARCINELLI MEMORIAL SCHOLARSHIP FUND—Med Science Laboratories, Scranton, established this scholarship in 1983 to honor the memory of Josephine Sarcinelli, the office manager of the firm for many years. The annual scholarship is awarded by the Director of Financial Aid to an incoming freshman from Lackawanna County who is in financial need and intends to major in medical technology.

THE AMELLA SURACI SCHOLARSHIP FUND—This endowed scholarship fund was established in 1977 by the late Mr. Frank Suraci, Chairman of Parodi Cigar Corporation, to honor his wife Amelia. After Mr. Suraci's death, contributions from the Suraci and Keating families were added to the endowment. Each year, income from the fund is distributed to deserving and needy students.

THE PAUL L. WALEFF MEMORIAL SCHOLARSHIP—This Fund was established by the parents of Paul L. Waleff, who died in 1984 while a student at the University of Scranton. Each year, the Director of Financial Aid awards the scholarship to a senior or junior who plans a career of service to the handicapped.

THE WILLIAM ZAHLER SCHOLARSHIP FUND—In 1986, Mr. and Mrs. William P. Zahler of Mayfield Heights, Ohio established a scholarship in memory of their son William Zahler, Jr. Their son had been an associate professor of English at the University until his untimely death in 1986. Income from the endowed scholarship is distributed to deserving young men and women by the University's Financial Aid Office.

FUNDED AWARDS

DR. A.J. CAWLEY AWARD—In memory of Dr. A.J. Cawley of Pittston, Pa., a fund was established by a legacy from his sister, Miss Ellen Cawley. Income therefrom is used to provide an award to a Physics Major each year.

JOSEPH P. HARPER AWARD—A fund was established in 1967 to honor the memory of Joseph P. Harper, Professor of Physics. An annual award is given to a senior Physics major upon the recommendation of the Physics department and with the approval of the Director of Financial Aid. The Department of Physics presents with the award, a citation reminding the recipient of the high scholarly ideals, exemplary life, and dedicated service represented by Professor Harper.

THE KATHRYN AND BERNARD HYLAND MEMORIAL AWARD FOR EXCELLENCE IN BIOLOGY—A gift from alumnus Bernard V. Hyland, M.D., made in loving memory of his parents, established in 1980 an endowment to perpetuate this annual award. The award is presented to a graduating senior from the Biology Department who, in the opinion of the department's faculty, has achieved distinction based on academic excellence in biology, personal integrity and concern for others.

THE ROSE KELLY AWARD—A University of Scranton alumnus, Joseph Wineburgh, Ph.D., set in place an endowment to link the efforts of elementary and secondary school teachers to the achievements of college students. Each year, an outstanding student is selected by a committee appointed by the Academic Vice President. The Rose I. Kelly Award winner is asked to name a high school or elementary teacher who most influenced his or her pre-college academic preparation. Both the student and the teacher from pre-college days are honored at a campus ceremony. The student also receives a plaque and a book, selected by the student's department chairman. A copy of the same book is placed in the University Library.

Dr. Wineburgh established the program to honor an elementary teacher, Rose I. Kelly, who greatly influenced his life.

ANNUAL SCHOLARSHIPS

UNICO SCHOLARSHIPS—Continuing yearly contributions are made to the University scholarship fund by the Scranton Chapter of UNICO (Unity-Neighborliness-Integrity-Charity-Opportunity), a national service organization. Scholarship help, not to exceed $500 per recipient, is granted yearly to students demonstrating financial need and good academic standing.

LACKAWANNA COUNTY LAWYERS' AUXILIARY SCHOLARSHIP—Established in 1982, this award is annually presented to an outstanding graduating senior from Lackawanna County to provide scholarship assistance in first year of law school. The scholarship is given directly by the Lawyers' Auxiliary, upon the recommendation of the University Pre-Law Advisor.

BIENNIAL SCHOLARSHIP

FRIENDLY SONS OF ST. PATRICK SCHOLARSHIP—Biennially the Society provides funds for a University of Scranton student to enjoy the benefits of an academic experience, usually one or two semesters, in Ireland. The grant is for $2,000. Contact Dr. Mary Engel, Associate Dean of the College of Arts and Sciences, for further information.

ENDOWED CHAIRS

THE ALPERIN CHAIR IN BUSINESS ADMINISTRATION—Established by an endowment, this academic chair was set in place in 1980 through the gifts of three Scranton businessmen: Joel, Irwin and Myer Alperin, and their families.

The late Joel Mitchell Alperin was the originator and the principal sponsor of the chair and its endowment. Income from the Alperin brothers' gift is applied to the salary of a professor in the School of Management.

THE CHAIR IN JUDAIC STUDIES—Income from an endowment established by alumni and friends of the University makes it possible for the University to invite, for short visits to Scranton, Judaic scholars from Israel, or other parts of the world, for public lectures and meetings with students and faculty.

THE PIUS X TEACHING CHAIR OF THEOLOGY—Established in 1976 by an anonymous gift, and the assignment of a matching grant from the University's Commitment to Excellence capital campaign, this chair is occupied by a priest, or jointly by a set of priests, of the Diocese of Scranton. The chairholders are nominated by the faculty of St. Piux X Seminary and approved by the faculty of the Department of Theology and Religious Studies at the University.

THE JOSEPH T. AND FRANK M. McDONALD CHAIR—Income from an endowment established by George and Dr. Herbert McDonald is used primarily to support the Pre-Law program, including support of the pre-law advisor, internship program, and advisory team; income is also used to provide scholarship assistance to deserving students in pre-law majors.

OTHER ENDOWMENTS

THE GUNSTER LIBRARY FUND—Established by the 1980 bequest of Joseph F. Gunster, Class of '17, income from this fund provides annual support for Alumni Memorial Library.

JESUIT COMMUNITY CONTRIBUTION—Total contributed services of the members of the Jesuit Community of Scranton have been approximately $3,000,000 since 1942. This gift of funds, returned to the University from payments made to Jesuits for their services, has enabled the University to offer many scholarships from its operating budget and has substantially aided the building program.

JOHN J. LONG, S.J., FUND—Contributions to this fund were made by friends of the Very Rev. John J. Long, S.J., President of the University 1953-1963, on the occasion of his Golden Jubilee in the Society of Jesus and later as a memorial after his death in 1971. The fund is invested and the income therefrom is used for projects and programs concerned with the spiritual growth of students.

THE LOYOLA LECTURE—The Jesuit Community serving the University of Scranton has endowed a lecture program intended to bring distinguished Jesuit speakers to campus. Named in honor of St. Ignatius Loyola, founder of the Jesuit Order, this fund can also support visits by other scholars capable of assisting the University community to better appreciate the Jesuit heritage.

Faculty and Staff Directory

Dr. Richard H. Passon
Provost and Vice-President for Academic Affairs

BOARD OF TRUSTEES

Joseph A. Appleyard, S.J.
John J. Begley, S.J.
Roydon B. Davis, S.J.
Louis DeNaples
James C. Doyle
William L. George, S.J.
John J. Higgins, S.J.
B. Carl Jones
Gerard P. Joyce
Herbert B. Keller, S.J.
Edward J. Lynett, Jr.
Mary E. McDonald
Thomas F. McGrath
Sen. Robert J. Mellow
Morey M. Myers., Esq.
Robert E. Nolan, Jr.
J.A.Panuska, S.J.
Robert F. Pugliese, Esq.
Msgr. Paul J. Purcell
Elizabeth B. Redington
Gerard R. Roche
Patrick T. Ryan, Esq.
Patrick Samway, S.J.
Joseph A. Sellinger, S.J.
Stuart Subotnick
Samuel R. Todaro, M.D.

Officers of the University of Corporation

J.A. Panuska, S.J., President
Marilyn Coar, Secretary
David E. Christiansen, Treasurer

OFFICERS OF ADMINISTRATION

President of the University (1982)
J.A.Panuska, S.J. (1982)
Professor of Biology (1982)
B.S., Loyola College;
Ph.L., Ph.D., St. Louis University;
S.T.L., Woodstock College;

Provost and Vice President for
Academic Affairs (1984)
Richard H. Passon (1984)
Professor of English (1984)
A.B., King's College;
M.A., Ph.D., University of Notre Dame

Vice President for Administrative Services (1983)
John S. Flanagan (1974)
L/Colonel, U.S. Army-Ret.
A.B., College of William and Mary;
M.S., University of Alabama

Vice President for Development (1983)
Robert J. Sylvester (1983)
B.S., University of Scranton;
M.A., Fairfield University

Vice President for Student Affairs (1988)
James T. Bryan (1988)
B.S., State University of New York College at Fredonia;
M.A., Michigan State University;
Ed.D., Columbia University

Vice President for Finance/Treasurer (1987)
David E. Christiansen (1987)
B.S./M.B.A., LaSalle University

Vice President for Planning (1986)
Glenn Pellino (1980)
B.A., M.A., St. Louis University;
Cand. Ph.D., University of Michigan

Dean, College of Arts and Sciences (1986)
John W. Carlson (1983)
Associate Professor of Philosophy (1983)
B.A., St.Mary's College of California;
Ph.D., University of Notre Dame

Dean, Dexter Hanley College,
Director of Instructional Development
and of Learning Resources Center (1986)
Shirley M. Adams (1986)
Assistant Professor of Education (1986)
B.A., University of Northern Iowa;
M.A., University of Iowa;
Ph.D., Iowa State University

Dean, School of Management (1986)
Joseph J. Horton (1986)
Professor of Finance
B.A., New Mexico State University;
M.A., Ph.D., Southern Methodist University

Dean, College of Health, Education,
and Human Resources (1987)
John E. Gay (1987)
Professor of Human Resources (1987)
B.S., State University of New York at Buffalo;
M.S., California State University at San Diego;
Ph.D., West Virginia University

Dean, Graduate School and
Director of Research (1985)
Thomas P. Hogan (1985)
Professor of Psychology (1985)
B.A., John Carroll University;
M.A., Ph.D., Fordham University

Assistant Provost/AVP (1987)
Lee Williames (1987)
Professor of History (1987)
B.A., LaSalle University;
M.A., Niagara University;
A.C.S., Soviet Institute, Niagara University;
Ph.D., State University of New York at Binghamton

Dean of Admissions (1981)
Bernard R. McIlhenny, S.J., D. et U.* (1958)
A.B., M.A., Loyola University Chicago;
S.T.B., Woodstock College

Associate Dean, College of Arts and Sciences (1986)
Director, Academic Advising Center (1987)
Mary F. Engel (1986)
Associate Professor of English (1986)
B.A., St. Bonaventure University;
L.L., Katholieke Universiteit te Leuven;
Ph.D., Kent State University

Associate Dean, School of Management (1985)
George V. Babcock, D. et U.* (1963)
Associate Professor of Economics (1974)
A.B., M.A., Ph.L., Boston College;
M.B.A., New York University

Dean Emeritus/Assistant to Academic
Vice President (1984)
Charles J. Buckley, D. et U.* (1947)
Associate Professor of Business
Administration (1968)
B.S., University of Scranton;
M.B.A., New York University

Director of Campus Ministries (1976)
Thomas D. Masterson, S.J. (1976)
Assistant Professor of History (1976)
A.B., M.A., Fordham University;
Ph.L., S.T.B., S.T.L., Woodstock College;
M.A., Ph.D., Georgetown University

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.
**On Leave

Special Assistant to the President (1987)
Rev. William Hill, S.J., D. et U.* (1946-47,1969)
Professor of English (1969)
A.B., Georgetown University;
Ph.L., Woodstock College;
S.T.L., Weston College;
M.A., Ph.D., Fordham University

Executive Director of Technology Center (1988)
Jerome DeSanto (1979)
B.S., M.B.A., University of Scranton

PROFESSIONAL STAFF AND SERVICES

Matthew Armstrong (1984)
Director of Central Services (1988)
B.S., Pennsylvania State University

Anne Baldwin (1988)
Grants Information Specialist (1988)
B.A., State University of New York at Binghamton

Ann Clark Bass (1978)
Director of Credit Programs,
Dexter Hanley College (1987)
B.M., Marywood College;
M.A., Northeast Missouri State University

Thomas N. Beckish (1964)
Assistant Director of Counseling Center (1964)
Assistant Professor of Psychology (1967)
B.S., M.S., University of Scranton
Licensed Psychologist (1973)

John Bluth (1987)
Director of Archives (1987)
B.S., Weber State College
M.A., Ph.D., Brigham Young University

Cheryl Y. Boga (1982)
University Singers/Band Director (1982)
B.M., Marywood College

Karen Borden (1987)
IBM Systems Programmer/
Technical Analyst, IBM
University Computing Systems (1987)
B.A., Temple University

Aileen Boyle (1983)
Assistant Dean, CAS (1987)
B.S., M.B.A., University of Scranton

Douglas Brickel (1986)
Director of Intramural and
Recreational Sports (1987)
B.S., East Stroudsburg University

Paul Brown (1987)
Director of Public Relations (1987)
B.A., Simpson College;
M.S., Columbia University

Diane Brunnett (1986)
Computer Programmer
University Computing Systems (1986)
B.S., University of Scranton

M. Russell Buchanan (1985)
Assistant Director for
Library Technical Services and Automation (1985)
B.A., Grove City College
M.A., Carnegie Mellon University;
M.L.S., University of Pittsburgh

Michele Buchinski (1984)
Small Business Development
Center Resource Coordinator (1984)

Arthur J. Bugh (1978)
Director of International Student Affairs (1986)
B.S., United States Military Academy;
M.S., University of Illinois;
M.B.A., University of Scranton

Kenneth S. Buntz (1979)
Sports Information Director (1979)
A.A., Keystone Jr. College;
B.A., University of Scranton

Robert J. Burke, D. et U.* (1961)
Director of Personnel Services (1974)
B.S., M.S., University of Scranton

William R. Burke
Associate Director, Financial Aid (1986)
B.S., Bloomsburg University

John J. Burns, S.J. (1976)
Director of Deferred Giving (1979)
B.S., St. Joseph's College;
S.T.B., Woodstock College;
Ph.L., M.A., St. Louis University

Mark Byrd (1987)
Director of Institutional Research (1987)
B.A., Ouachita University;
M.A., University of Arkansas

Marianne Czernysz Cawley (1987)
Assistant to Dean CAS (1987)
B.S., Regis College

Laurence Coar (1985)
Director, Small Business
Development Center (1986)
B.S., University of Scranton

Marilyn Coar, D. et U.* (1948)
University Secretary and Executive
Assistant to the President (1987)
A.B., Rosemont College

Teresa Corazzini (1987)
SBDC Business Counselor (1987)
B.S., University of Scranton

Lisa Cornell (1983)
Programmer/Analyst, University Computing
Systems (1983)
B.S., University of Scranton

Mark Costello (1987)
Admissions Counselor
B.A., M.A., Mansfield University

The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.
*On Leave

Mary Danuinas (1987)
Assistant Manager of Annual Fund (1987)
B.S., University of Scranton

Stephen A. Dembrosky (1980)
Director of Security/Safety (1981)

James Devers, AIA (1985)
Staff Architect-Quality Control Officer (1985)
Associate Degree, Luzerne County
Community College

Frank Durkin (1988)
Staff Accountant (1988)
B.S., University of Scranton

Kim Ellicks (1987)
Assistant Dean of Students (1987)
B.A., Lock Haven University

Teresa Fallon (1983)
Theatre Technical Director (1983)
B.A., University of Scranton

James Franceschelli (1982)
Assistant Director of Information
Support Services (1988)
Associate Degree, Pennsylvania State
University

Roseann Froese (1984)
Programmer/Analyst, University Computing
Systems (1984)
B.S., University of Scranton

William Genello (1984)
Associate Director of Public Relations (1987)
B.A., St. Bonaventure University

Janet N. Gilroy (1983)
Coordinator of Admissions
Dexter Hanley College (1988)
B.S., M.S., University of Scranton

Barbara Gleason (1982)
Assistant to Dean,
School of Management (1982)
B.S., University of Scranton

James Goonan (1987)
Assistant to the Dean,
Graduate School (1987)
B.S., University of Scranton

Lucia Granito (1983)
Assistant to Comptroller (1983)
B.S., M.S., University of Scranton

Sharon Grasso (1985)
Academic Advisor
Dexter Hanley College (1985)
B.S., M.A., University of Scranton

Judith R. Henning (1988)
Director, Learning Resources
Center (1988)
B.S., M.S., Marywood College

Larry J. Hickernell (1986)
Head of Media Resources (1986)
A.S.B., Central Pennsylvania
Business School

Cynthia Hricko (1985)
Programmer/Analyst, University Computing
Systems (1985)
B.S., University of Scranton

Debbie Hudzinski (1987)
Information Support Analyst,
University Computing Systems (1987)
B.S., Marywood College

Thomas Hughes (1986)
ISS Analyst, Labs
University Computing Systems (1986)
B.S., University of Scranton

John Janiczek (1988)
IBM Systems Program/Tech
Analyst (1988)
B.S. Susquehanna University

Ann Joyce (1986)
Publications Coordinator (1986)
B.F.A., Maryland Institute College of Art

Annmarie Kalafut (1985)
Programmer/Analyst, University Computing
Systems (1985)
B.S., East Stroudsburg University

Annette Kalwaytis (1982)
Library Circulation Supervisor (1985)

Kathleen A. Kanavy (1981)
Minister of Liturgical Music/
Associate Campus Minister (1981)
B.M., Marywood College

Janice Kane (1986)
Recreation Assistant (1986)
B.A., University of Scranton

Mary Joan Kanzler (1986)
Counselor, Admissions (1986)
B.S., M.S., University of Scranton

John T. Kelly, S.J. (1985)
Assistant Dean of Admissions (1985)
B.A., Fordham University;
M.A., Fordham University;
M.A., New York University;
M. Div., Woodstock College

Louis C. Kleff, S.J., D. et U.* (1953)
Director of Physical Facilities
and Plant Development (1974)
A.B., M.A., Woodstock College

Robert Klem (1987)
Programmer/Analyst,
University Computing Systems (1987)
B.S., Marywood College

Kathleen R. Kopcik (1974)
Counselor (1974)
A.B., Marywood College;
M.S., University of Scranton

Deborah A. Kuhar (1986)
Asstistant Director of Research (1988)
B.S., University of Scranton;
M.Ed., Temple University

Brendan Lally, S.J. (1986)
Associate Campus Minister (1986)
B.S., University of Scranton;
M.D.V., Weston School of Theology;
M.P.S., Loyola University

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.
**On Leave

Martin L. Langan (1974)
Assistant Vice President for Operations (1988)
B.S., M.B.A., University of Scranton

John W. Lange, S.J. (1964-66;1974)
Counselor (1975)
A.B., Bellarmine College;
S.T.B., Woodstock College;
M.S., University of Scranton

Zim E. Lawhon, D. et U.* (1964)
Colonel, U.S.Army-Ret.
Professor of Military Science (1964)
Registrar (1970)
A.B., M.S., Princeton University

Thomas J. Loven (1986)
Assistant Director, Center for
Book Research (1986)
B.S., University of Scranton

Lorraine Mancuso
Technical Analyst, DBA
University Computing Systems (1982)
B.S., University of Scranton

Constance F. McDonnell (1983)
Counselor, Career Services (1983)
B.A., University of Denver;
M.A., Marywood College

Ellen E. McGuire (1988)
Assistant to the Dean, CHEHR (1988)
B.A., Pennsylvania State University

Aileen McHale (1988)
ISS Software Analyst (1988)
B.S., King's College

John F. McNamara (1975)
Comptroller (1982)
B.S., University of Scranton

Vincent Merkel (1978)
ISS Analyst, Software,
University Computing Systems (1978)
B.S., University of Scranton

Linda Mlodzienski (1988)
Staff Accountant (1988)
B.S., University of Scranton

James Morgan (1986)
Computer Specialist (1987)
A.A., Penn State University

Lawrence J. Morton (1969)
Dean of Students (1974)
A.B., St. Bonaventure University;
M.S., Syracuse University;
M.S., University of Scranton;
D.Ed., Pennsylvania State University

Mary Moylan (1986)
Public Service/
Reference Librarian (1986)
B.A., Marywood College;
M.L.S., Villanova University

Daniel Munafo (1987)
Career Counselor (1987)
B.S., Pennsylvania State University;
M.S., Shippensburg University

Joseph Murtha (1984)
Director of Physical Plant (1984)

Edward T. O'Donnell, S.J. (1985)
Academic Advisor,
Dexter Hanley College (1985)
B.A., Fordham University;
M.Div., S.T.L., Regis College, Toronto

Frank Orlando (1976)
Associate Registrar (1984)
B.S., Wilkes College;
M.B.A., University of Scranton

Marilyn Orlovsky (1986)
Personnel Assistant for Information Systems (1986)
B.S., State University of New York at Oneonta

G. Donald Pantle, S.J. (1980)
Associate Campus Minister (1980)
B.A., Bellamine College;
M.A., Middlebury College

Frank D. Parker (1969)
Assistant Director, Special Projects,
University Computing Systems (1987)
B.S., University of Scranton

Frank Pasquini (1987)
Director of Development (1987)
B.A., King's College;
M.S., University of Scranton

Paul Perhach (1982)
Director of Career Services (1982)
B.A., King's College;
M.S., Marywood College

Howard Piltz (1986)
Biology Lab Supervisor (1986)
B.S., Pennsylvania Military College

Patricia Popeck (1987)
University Nurse (1987)
R.N., B.S.N., University of Virginia

J.Frank Reddington, M.D., D. et U.* (1940)
University Physician (1940)
A.B., Holy Cross College;
M.D., Georgetown University

Kathryn Reedy (1982)
Coordinator of Development
Services and Prospect Research (1984)
B.S., University of Scranton

Sr. Joan Roccasalvo, C.S.J. (1976-81,1986)
Coordinator, Eastern Christian
Studies (1986)
Assistant Professor of Fine Arts (1987)
B.Mus., Alverno College;
M.A., New York University;
Advanced Studies, Villa Schifanoia Graduate
School of Fine Arts, Florence, Italy; John
XXIII Institute;
Ph. D., The Catholic University of America

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.
**On Leave

Sr. Judith Roemer (1987)
Assistant Director, Institute for Contemporary Spirituality (1987)
B.A., Silver Lake College;
M.A., Marquette University

John M. Rose (1983)
Administrative Computer Support Manager (1988)
B.S., King's College;
M.B.A., University of Scranton

Mirtha M. Rospigliosi (1971)
Assistant Director of Financial Aid (1979)

Warren Rozelle (1984)
Business Counselor,
Small Business Development Center (1984)
B.A., Bloomsburg State College

Marie A. Ryan (1983)
Nursing Learning Laboratory
Director (1983)
B.S., College Misericordia;
M.S., University of Scranton

Maureen P. Ryan (1985)
Programmer/Analyst, University Computing Systems (1985)
B.S., University of Scranton

Thomas A. Santucci (1976)
Electronic Data Processing
Coordinator (1976)

George J. Schemel, S.J. (1985)
Director,Institute of Spirituality (1985)
B.S., University of Scranton
M.A., Ph.L., Fordham University;
St.L., Woodstock College

Katherine M. Schneider (1988)
Director, Counseling Center (1988)
Assistant Professor of Psychology (1988)
B.S., Michigan State University;
M.S., Ph.D., Purdue University;
Licensed Clinical Psychologist

Joseph Simmons, S.J. (1984)
Director of Student Commuter Activities (1984)
A.B., M.A., Loyola University, Chicago

Ronald J. Skutnick (1981)
Assistant Director of Technical Services
University Computing System (1988)

Eric Snyder (1985)
Library Associate (1987)
A.A., Keystone College

Albert J. Solomon (1984)
Director of Continuing Education (1984)
Assistant Professor of Communication and Media Studies (1987)
B.A., M.A., University of Scranton;
Ph.D., Pennsylvania State University

Bonnie Strohl (1985)
Assistant Director, Public Services & Collection Development, Library (1985)
A.B., University of Miami;
M.S., Shippensberg State College;
M.D.L., Simmons College

Paul Strunk (1985)
Assistant Director of Development/
Assistant to the President (1987)
B.A., University of Pittsburgh

Rosemary Sylvester (1976)
Assistant Director,
Personnel Services (1980)

John Tabor (1978)
Senior Programmer/Analyst, University Computing Systems (1979)
B.S., University of Scranton

Linda Thomas (1987)
VAX System Programmer/Analyst (1987)
B.S., East Stroudsburg University;
B.S., Wilkes College

Joseph M. Tierney, D. et U.* (1964-77,1981)
Director of Financial Aid (1981)
B.A., University of Scranton

Marie Trovato (1986)
Manager, Annual Fund (1988)
B.A., Shippensburg University

Diana Moore Trygar (1983)
Chemistry Laboratory Supervisor
B.S., University of Scranton

Richard Trygar (1984)
Associate Chemistry
Laboratory Supervisor (1984)
B.S., University of Scranton

Elaine Tweedy (1987)
SBDC Business Counselor (1987)
B.S., Marywood College

Patricia Vaccarro
Director of Student Volunteers (1987)
B.A., Marywood College

Helen Weiss (1986)
Library Associate (1987)
B.S., Moorhead State College

Gary S. Zampano (1974)
Director of Procurement and Inventory (1986)
B.S., M.B.A., University of Scranton

Robert P. Zelno (1982)
Director of Alumni Relations
B.S., M.S., University of Scranton

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.
**On Leave

FACULTY

PROFESSORS EMERITI

Martin D. Appleton, Ph.D.
D. et U.* (1955-1988)
Department of Chemistry

John J. Baldi, M.S.S.W.,
D. et U.* (1948-1981)
Department of Sociology

Edward F. Bartley, M.A.
D. et U.* (1938-1987)
Department of Math/Computer Science

Everett R. Brown, Ph.D.
(1975-1988)
Department of Management/Marketing

Frank A. Cimini, M.A.
D. et U.* (1941-1985)
Department of Foreign Languages and Literatures

Thomas M. Garrett, Ph.D.
D. et U. (1960-1988)
Department of Philosophy

Richard F. Grady, S.J., Ph.D., L.H.D.,
D. et U.* (1942-1970)
Department of English

Walter Haab, Ph.D.
D. et U.* (1942-1980)
Department of Chemistry

William B. Hill, S.J., S.T.L., Ph.D.
D. et U.* (1946-1947, 1969-1983)
Department of English

Daniel J. Houlihan, J.D.
D. et U.* (1947-1985)
School of Management

Anne J. Jones, M.A.
D. et U.* (1967-1987)
Department of Fine Arts (1975-1986)

Helen P. Kelly, M.S.
D. et U.* (1959-1980)
Assistant Librarian

Lawrence J. Lennon, Ph.D.
D. et U.* (1946-1974)
Department of Psychology

Marianne McTighe
D. et U.* (1946-1986)
Associate Librarian

John J. Murray, Ph.D.
D. et U.* (1957-1988)
Department of English

Mildred A. Norton
D. et U.* (1946-1988)
Associate Librarian

Matthew R. O'Rourke, M.A.
D. et U. (1955-1982)
Department of English

Andrew W. Plonsky, M.S., E.E.
D. et U.* (1947-1980)
Department of Math/Computer Science

Edward R. Powers, S.J., M.A., S.T.L.
D. et U. (1955-1985)
Department of Math/Computer Science

Stephen P. Ryan, Ph.D.
D. et U.* (1960-1981)
Department of English

Henry V. Sattler, C.SS.R.
D. et U.* (1967-1988)
Department of Theology

Angelina T. Scardamaglia, M.S.
D. et U.* (1947-1978)
Assistant Librarian

Timothy H. Scully, M.A.
D. et U.* (1948-1951, 1956-1988)
Department of History/Political Science

Charles B. Trundle, S.J., M.A., S.T.L.
D. et U.* (1948-1951, 1953-1975)
Department of Theology

Leonard N. Wolf, Ph.D., D.Sc.
D. et U.* (1937-1974)
Department of Biology

PROFESSORS

Neill H. Ackerman (1983)
Associate Professor of Mathematics/Computer Science (1983)
B.S., Upsala College;
M.S., Ph.D., Lehigh University

David C. Adams (1983)
Associate Professor of Management
B.S., Rochester Institute of Technology;
M.S., SUNY College of Environmental Science;
Ph.D., Syracuse University

Bert Akers, S.J. (1986)
Associate Professor of Communication (1986)
B.A., Ph.L., St. Louis University;
S.T.L., University of Innsbruck/Woodstock College;
S.T.D., Woodstock College

Barry R. Anderson (1974)
Associate Professor of Biology (1980)
B.S., State University of New York at Fredonia;
M.S., Ph.D., Lehigh University

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.
**On Leave

Panos Apostolidis (1977)
Associate Professor of Marketing (1977)
B.B.A., University of Athens;
M.B.A., University of Houston;
Ph.D., University of Arkansas

Patricia A. Bailey (1983)
Associate Professor of Nursing (1987)
Chairperson, Department of Nursing (1988)
B.S.N., Ed.M., Ed.D., Columbia University

Harold W. Baillie (1978)
Associate Professor of Philosophy (1987)
A.B., Yale University;
M.A., Ph.D., Boston College

Thomas E. Baker (1975)
Assistant Professor of Sociology/
Criminal Justice (1975)
B.S., M.S., Virginia Commonwealth U;
M.Ed., M.S., East Stroudsburg University

William M. Baker (1985)
Assistant Professor of Accounting (1985)
B.S., Pennsylvania State University;
M.B.A., University of Scranton

Galen L. Baril (1975)
Associate Professor of Psychology (1985)
B.A., University of Nevada;
Ph.D., University of Maine

Carolyn E. Barnes (1988)
Professor of Physical Therapy (1988)
Chairperson, Department of Physical
Therapy (1988)
B.A., Fairmont State College;
M.S., West Virginia University;
Certificate in Physical Therapy,
D.T. Watson School of Physiatrics;
Ph.D., University of Pittsburgh

Christopher Baumann (1984)
Assistant Professor of Chemistry (1984)
B.S., Oregon State University;
Ph.D., University of Florida

Rebecca S. Beal (1983)
Associate Professor of English (1988)
A.B., Westmont College;
M.A., University of Chicago.
Ph.D., University of Texas

John Begley, S.J. (1985)
Associate Professor of Theology/
Religious Studies (1985)
A.B., M.A., Boston College;
Ph.L., S.T.L., Weston College;
S.T.D., Gregorian University

John A. Beidler, C.D.P., D. et U.* (1964)
Professor of Mathematics/Computer Science (1976)
Chairperson, Department of Mathematics/
Computer Science (1980)
A.B., King's College;
M.A., Lehigh University;
Ph.D., Pennsylvania State University

Paul R. Beining, S.J., D. et U.* (1949-1951,1967)
Professor of Biology (1974)
B.S., Ph.L., Spring Hill College;
S.T.L., Woodstock College;
M.S., Ph.D., The Catholic University of America

J. Brian Benstad (1976)
Associate Professor of Theology (1983)
A.B., Assumption College;
S.T.L., Gregorian University;
Ph.D., Boston College

Janet Benestad (1988)
Lecturer in History and Philosophy (1988)
B.A., Marymont College;
M.A., Boston College

Robert M. Bessoir, D. et U.* (1968)
Associate Professor of Physical
Education (1973)
B.S., University of Scranton;
M.S., East Stroudsburg University

Gerald Biberman (1981)
Associate Professor of Management (1987)
B.A., M.A., Ph.D., Temple University

Frederic A. Birmelin (1985)
Instructor in Physics/EE (1987)
B.S., M.A., University of Scranton

David W. Black (1984)
Associate Professor of Philsophy (1984)
B.A., Northern Illinois University;
M.A., Ph.D., Pennsylvania State University

Rosellen Bohlen (1987)
Instructor of Nursing (1987)
B.S.N., University of Illinois;
M.S.N., University of Rochester

Mrigen Bose, D. et U.* (1968)
Associate Professor of Economics (1977)
B.S., Patna University;
M.A. (Comm.), M.A. (Econ.),University of
Calcutta;
M.S., University of Kentucky;
Ph.D., University of Utah

Richard J. Bourcier, D. et U.* (1968)
Professor of Foreign Languages (1984)
A.B., Assumption College;
M.A., Laval University;
Ph.D., State University of New York
at Binghamton

James P. Buchanan (1977)
Associate Professor of Psychology (1981)
B.A., The Johns Hopkins University;
M.A., Ph.D., University of California,
Los Angeles

Michael C. Cann (1975)
Professor of Chemistry (1988)
B.A., Marist College;
M.S., Ph.D., State University of
New York at Stony Brook

Joseph M. Cannon, D. et U.* (1959)
Professor of Education (1974)
B.S., University of Scranton;
M.Ed., Doctoral Studies,
Pennsylvania State University
Licensed Psychologist

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University.
**On Leave

J. Timothy Cannon (1981)
Associate Professor of Psychology (1986)
B.S., University of Scranton;
Ph.D., University of Maine

Edward J. Capestany, D. et U.* (1968)
Professor of Philosophy (1974)
B.S., M.A., University of Comillas, Spain;
Ph.D., University of Ottawa

Michael D. Carey (1978)
Associate Professor of Biology (1982)
B.A., Wittenberg University;
M.A., Ph.D., Indiana University

Brian Carpenter (1987)
Assistant Professor of Accounting (1987)
B.S., The Pennsylvania State University;
M.B.A., University of Scranton;
Ph.D., The Pennsylvania State University

Ellen M. Casey (1969)
Professor of English (1981)
B.S., Loyola University, Chicago;
M.A., University of Iowa
Ph.D., University of Wisconsin

Judith A. Casey (1988)
Lt. Col., U.S. Army
Professor of Military Science (1988)
B.S., Fort Hays State University;
M.S., Florida International University

Stephen J. Casey (1969)
Associate Professor of Theology (1981)
A.B., Iona College;
M.A., Marquette University

Timothy K. Casey (1987)
Assistant Professor of Philosophy (1987)
B.A., Loras College;
M.A., University of Pittsburgh;
M.A., Ph.D., Duquesne University

Charles Chamberlain (1985)
Capt., U.S. Army
Assistant Professor of Military Science (1985)
B.S., Central Missouri State University

Raymond W. Champagne, Jr., D. et U* (1967)
Professor of History (1981)
A.B., Providence College;
M.S., Duke University;
Ph.D., Loyola University, Chicago

Leonard Champney (1979)
Associate Professor of Political Science (1984)
B.S., University of Texas, El Paso;
Ph.D., Rutgers University

Ying I. Chien (1979)
Associate Professor of Quantitative Management (1979)
B.S., National Taiwan University;
M.S., University of Manitoba;
Ph.D., University of Kentucky

Jafor Chowdhury (1987)
Assistant Professor of Management/Marketing (1987)
M. Comm., B. Com., Dacca University;
M.B.A., Dalhousie University;
Ph.D., Temple University

Ruth Yaron Cicilioni (1982)
Assistant Professor of Math/Computer Science (1986)
B.S., East Stroudsburg University;
M.S., Villanova University;
M.B.A., University of Scranton

Joseph F. Cimini (1981)
Assistant Professor of Sociology/Criminal Justice (1980)
B.A., University of Scranton;
J.D., Columbus School of Law, Catholic University of America

John J. Clarke (1986)
Professor of Communication (1986)
A.B., University of Scranton;
A.M., Fordham University;
M.S.J., Columbia University;
Ph.D., Brown University

Orestes P. Coccia, S.J. (1975)
Assistant Professor of Theology (1975)
A.B., Fordham University;
Th.B., Regis College, Toronto;
Ph.D., University of Strasbourg

James J. Conlin, S.J., D. et U.* (1967)
Professor of Sociology (1970)
A.B., Ph.L., M.A., Ph.D., St.Louis University;
S.T.L., Woodstock College

Joseph W. Connolly (1983)
Associate Professor of Physics/Electronics Engineering (1983)
Chairperson, Department of Physics/EE (1988)
B.S., University of Scranton;
M.S., University of Illinois;
Ph.D., Pennsylvania State University

Willis M. Conover (1978)
Associate Professor of History (1986)
B.A., B.S., Pennsylvania State University;
M.S., Ed.D., Montana State University

John R. Conway (1985)
Associate Professor of Biology (1985)
B.S., Ohio State University;
M.A., Ph.D., University of Colorado

Frank P. Corcione (1978-1979,1982)
Associate Professor of Economics (1982)
B.A., Moravian College;
M.A., Ph.D., Lehigh University

James J. Cunningham, D. et U.* (1968)
Associate Professor of Education (1971)
Chairperson, Department of Education (1988)
A.B., King's College;
Ed.M., Ed.D., Rutgers University;
Licensed Psycholol gist

Wayne H.J. Cunningham (1987)
Associate Professor of Production Management (1987)
B.S., M.B.A., Ph.D., The Pennsylvania State University

Francis H. Curtis, D. et U.* (1966)
Associate Professor of Education (1980)
B.S., M.Ed., Pennsylvania State University

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University
**On Leave

Thomas W. Decker (1977)
Associate Professor of Human Resources (1982)
B.A., Dickinson College;
M.Ed., University of Virginia;
Ph.D., Ohio State University;
Licensed Psychologist

Michael D. DeMichele, D. et U.* (1967)
Professor of History (1974)
Chairperson, Department of History/Political Science (1976)
B.S., University of Scranton;
M.A., Ph.D., Pennsylvania State University

Vito DelVecchio (1969)
Professor of Biology (1977)
Chairperson, Department of Biology (1987)
B.A., University of Scranton;
M.S., St. John's University;
Ph.D., Hahnemann Medical College Graduate School

Linda H. Desmond (1987)
Instructor of Nursing (1987)
R.N., Beebe Hospital School of Nursing
B.S.N., Cedar Crest College;
M.S.N., University of Delaware

Trudy Dickneider (1984)
Assistant Professor of Chemistry (1984)
B.A., M.A., St. Joseph's College;
Ph.D., University of Miami

Anthony J. DiStefano, D. et U.* (1968)
Associate Professor of Physics/Electronics Engineering (1977)
B.E.E., Brooklyn Polytechnic Institute;
M.A., Columbia University;
Ph.D., Stevens Institute of Technology

David J. Doiron (1985)
Assistant Professor of Physics/Electronics Engineering (1985)
B.S., Massachusetts Institute of Technology;
M.S., University of New Hampshire;
Ph.D., University of Iowa

Joseph C. Dougherty, D. et U.* (1967)
Professor of Political Science (1967)
A.B., St. Charles College;
M.A., Ph.D., Georgetown University

James N. Dragotto (1987)
Lecturer in Accounting (1987)
B.S., University of Scranton;
M.B.A., Lehigh University;
J.D., Valparaiso School of Law

Joseph H. Dreisbach (1978)
Associate Professor of Chemistry (1983)
B.A., LaSalle University;
M.S., Ph.D., Lehigh University

Katie S. Duke (1985)
Assistant Librarian (1985)
B.A., California Baptist College
M.L.S., University of Oklahoma;
Ph.D., Cand., University of Pennylvania

Josephine M. Dunn (1988)
Instructor in Fine Arts (1988)
B.A., B.F.A. University of Houston;
M.A., Ph.D. Cand., University of Pennsylvania

John J. Dunstone, D. et U.* (1966)
Professor of Psychology (1974)
B.S., Pennsylvania State University;
M.S., Ph.D., University of Massachusetts

Michael Dutko (1985)
Assistant Professor of Mathematics/Computer Science (1985)
B.S., Pennsylvania State University;
A.M., University of Michigan;
Ph.D., Pennsylvania State University

Kathleen G. Dwyer (1988)
Assistant Professor of Biology (1988)
B.S., East Stroudsburg University;
M.A., Ph.D., Princeton University

John L. Earl, III, D. et U.* (1964)
Professor of History (1972)
B.S., M.A., Villanova University;
Ph.D., Georgetown University

Gary E. Eichelsdorfer, D. et U.* (1965)
Associate Professor of Mathematics (1979)
A.B., Gannon College;
M.A., University of Detroit

Kurt W. Eisele (1986)
Capt., U.S. Army
Assistant Professor of Military Science (1986)
B.S., University of Scranton
M.S., M.S.,University of Scranton

Eileen M. England (1988)
Visiting Assistant Professor of Psychology (1988)
B.A., Florida State University;
M.S., Villanova University;
Ph.D., Lehigh University

Lee Ann Eschbach (1986)
Instructor in Education (1986)
B.S., Washington State University
M.S., Washington State University
Cand. Ph.D., Washington State University

Joseph T. Evans, D. et U.* (1953)
Professor of Biology (1965)
B.S., University of Scranton;
M.S., Ph.D., The Catholic University of America

Paul F. Fahey, Jr., D. et U.* (1968)
Professor of Physics/Electronics Engineering (1978)
B.S., University of Scranton;
M.S., Ph.D., University of Virginia

Matthew J. Fairbanks, D. et U.* (1960)
Professor of Philosophy (1970)
B.S., M.A., Loyola University, Chicago;
Ph.D., Notre Dame University

Matthew C. Farrell, D. et U.* (1967)
Professor of Education (1976)
A.B., M.S., University of Scranton;
Ph.D., Fordham University

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University
**On Leave

John Quentin Feller (1969)
Professor of History (1976)
A.B., Loyola College;
M.A., Ph.D., The Catholic University of America

Daniel V. Fraustino (1982)
Associate Professor of English (1985)
B.A., SUNY at Buffalo;
M.A., San Diego State University;
Ph.D., State University of New York
at Binghamton

Brigid Curtin Frein (1988)
Instructor in Theology/Religious Studies (1988)
B.A., Gonzaga University
Ph.D. Cand., St. Louis University

David O. Friedrichs (1977)
Associate Professor of Sociology (1983)
A.B., University College of New York;
M.A., New York University

Joseph A. Fusaro (1974)
Professor of Education (1983)
B.A., Rider College;
M.Ed., University of Vermont;
Ed.D., State University
of New York at Albany

William A. Gabello, CPA (1983)
Lecturer in Accounting (1983)
B.S., University of Scranton

Rosellen M. Garrett (1980)
Associate Professor of Nursing (1980)
B.S., College Misericordia;
M.S., University of Maryland;
Ph.D., Medical College of Pennsylvania

Thomas W. Gerrity (1976)
Associate Professor of Education (1986)
B.S., University of Pennsylvania;
M.S., University of Scranton;
Ed.D., Columbia University

Satyajit P. Ghosh (1986)
Assistant Professor of Economics (1986)
B.A., Presidency College, India;
M.A., University of Calcutta;
M.A., Ph.D., State University of New York,
Buffalo

A. John Giunta, D. et U.* (1960)
Professor of Business Administration (1967)
Chairperson, Department of
Economics/Finance (1987)
B.S., Harpur College;
M.S. Ph.D., Syracuse University

Irene Goll (1988)
Assistant Professor of Management (1988)
B.S., Pennsylvania State University
M.A., University of Illinois
Ph.D., Temple University

Deborah J. Gougeon (1979)
Associate Professor of Quantitative Management
(1988)
B.S., M.S., University of Scranton;
Ph.D., Walden University

Leonard G. Gougeon (1974)
Professor of English (1982)
B.A., St. Mary's University, Halifax;
M.A., Ph.D., University of Massachusetts

Gary R. Grainger (1988)
Instructor in Mathematics/Computer Science
(1988)
B.S., George Mason University;
Ph.D. Cand., University of Arizona

Ralph W. Grambo, Jr. (1973)
Associate Professor of Finance (1978)
B.S., University of Scranton
M.B.A., Ph.D., University of Pennsylvania

Ronald J. Grambo, C.P.A. (1976-77; 1980)
Associate Professor of Accounting (1988)
Chairperson, Department of Accounting (1987)
B.S., M.B.A., University of Scranton;
Ph.D., Pennsylvania State University

David Hair (1986)
Instructor in Physical Education (1986)
B.S., M.Ed., East Stroudsburg University

David W. Hall (1985)
Assistant Professor of Human Resources
(1987)
A.B., Lycoming College;
M.S., University of Scranton;
Ph.D., The Pennsylvania State University

Joseph M. Hamernick, S.J., D. et U.* (1970)
Assistant Professor of Communication (1970)
B.S., St. Joseph's College;
S.T.B., Woodstock College;
M.A., The Catholic University of America

Joseph A. Hammond, CPA (1983)
Instructor in Accounting
B.S. Lehigh University (1965)
M.B.A., University of Scranton (1983)

Michael A. Hardisky (1984)**
Assistant Professor of Biology (1984)
B.S., Lebanon Valley College;
M.S., Ph.D., University of Delaware

Patricia Harrington (1984)
Instructor in Nursing (1984)
B.S., Medgar Evers College;
M.S., Hunter-Bellevue School of Nursing

Claudia Harris (1988)
Assistant Professor of Management (1988)
B.S., Eastern Kentucky University,
M.B.A., University of Utah;
Ph.D., University of Utah

Jean Wahl Harris (1987)
Assistant Professor History/Political Science
(1988)
B.A., M.A., Ph.D., State University
of New York at Binghamton

Maurice I. Hart, Jr., D. et U.* (1963)
Professor of Chemistry (1971)
Chairperson, Department of Chemistry
(1985)
A.B., Maryknoll College;
M.S., Ph.D., Fordham University

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University
**On Leave

Eileen B. Hewitt (1982)
Assistant Professor of Management (1988)
Chairperson, Department of Management/Marketing (1987)
B.S., St. Joseph's College, Maine;
M.S., University of Hartford

John M. Hill (1981)
Associate Professor of English (1987)
B.A., Central College;
M.A., University of Illinois;
M.F.A., University of Iowa;
Ph.D. Cand., University of Illinois

Frank X.J. Homer, D. et U.* (1968)
Professor of History (1984)
A.B., University of Scranton
M.A., Ph.D., University of Virginia

John S. Hopkins, D. et U.* (1967)
Assistant Professor of Physical Education (1970)
B.S., East Stroudsburg University;
M.S., University of Massachusetts

Beth Howlett (1980)
Assistant Professor of Physical Educaton (1985)
B.S., M.S., SUNY at Cortland
M.S., University of Scranton

Robert F. Hueston, D. et U.* (1968)
Associate Professor of History (1976)
A.B., College of the Holy Cross;
M.A., Ph.D., University of Notre Dame

Riaz Hussain, D. et U.* (1967)
Associate Professor of Finance (1985)
B.S., Forman College, Pakistan;
M.S., University of Panjab, Pakistan;
M.B.A., University of Scranton;
Ph.D., Johns Hopkins University

Paul M. Jackowitz, C.D.P., C.C.P. (1977-80;1982)
Assistant Professor of Math/Computer Science (1982)
B.S. University of Scranton;
M.S., Rensselaer Polytechnic Institute

Jakub S. Jasinski (1987)
Assistant Professor of Mathematics/Computer Science (1987)
M.S., University of Gdansk;
Ph.D. University of Essex

Linda Jacob (1987)
Assistant Professor of Chemistry (1987)
B.A., M.A., Vassar College;
Ph.D., New York University

Bernard J. Johns, D. et U.* (1961)
Associate Professor of Mathematics (1979)
A.B., Wilkes College;
M.A., Bucknell University

Francis X. Jordan, D. et U.* (1966)
Associate Professor of English (1976)
Chairperson, Department of English (1987)
A.B., M.A., University of Scranton;
Ph.D., St. Louis University

John R. Kalafut, D. et U.* (1965)
Professor of Physics/EE (1974)
B.S., University of Scranton;
M.S., University of Delaware

Prasadarao V. Kakumanu (1987)
Professor of Quantitative Management (1984)
Chairperson, Department of Quantitative Management Systems (1987)
B.S., Andhra University;
M.S., Patna University;
M.A., Delhi University;
Ph.D., Cornell University

Thomas A. Kamla (1978)
Professor of Foreign Languages and Literatures (1987)
B.A., St. John's University, Minnesota;
M.A., Ph.D., University of Wisconsin

Jan W. Kelly (1988)
Associate Professor of Communication (1988)
B.A., Pennsylvania State University;
M.A., San Francisco State University;
Ph.D., University of Minnesota

Raymond L. Kimble (1973)
Associate Professor of Reading (1973)
B.S., Mansfield State College
M.S., State University of New York at Cortland;
Ed.D., Arizona State University

Stephen L. Klingman (1973)
Assistant Professor of Physical Education (1977)
B.S., M.S., Ithaca College

Richard Klonoski (1981)
Associate Professor of Philosophy (1988)
B.A., University of Scranton;
M.A., Kent State University;
Ph.D., Duquesne University

M. Jane Kopas, O.S.F. (1978)
Associate Professor of Theology/Religious Studies (1983)
B.S., M.A., St. Bonaventure University;
Ph.D., Graduate Theological Union

Edmund M. Kosmahl (1983)
Assistant Professor of Physical Therapy (1987)
B.S., M.S., Temple University

Ashok Kumar (1983)
Assistant Professor of Mathematics/Computer Science (1983)
B.S., Delhi University, India;
M.A., Ball State University;
M.S., Ph.D., Delhi University, India

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University
**On Leave

Gary G. Kwiecinski (1988)
Assistant Professor of Biology (1988)
A.A., A.A.S., Rockland Community College;
B.S., Cornell University;
M.S., Rutgers University;
Ph.D., Cornell University

Neela Lakshmanan (1987)
Assistant Professor of Mathematics/
Computer Science (1987)
B.S., M.S., Mysore University;
M.A., Ph.D., State University of New York at Buffalo

Linda Ledford-Miller (1985)
Assistant Professor of Foreign Languages (1988)
B.A., University of California, Irvine;
M.A., Pennsylvania State University;
Ph.D., University of Texas at Austin

A. Stanley Lefkowitz (1984)
Lecturer in Business Administration (1984)
B.S., City University of New York;
M.B.A., New York University

John L. Levko, S.J. (1979)
Professor of Mathematics (1987)
Director, Eastern Christian Studies (1986)
B.A., M.S., Ph.D., Lehigh University;
S.T.B., Gregorian University;
M.A., John XXIII Institute, Maryknoll;
S.E.O.L., S.E.O.D. Cand., Pontifical Oriental Institute, Rome, Italy

Dennis Linehan, S.J. (1967-69; 1984)
Assistant Professor of Theology/
Religious Studies (1985)
A.B., M.A., St. Louis University;
M.Div., Woodstock College;
Ph.D., University of London

Barbara Samuel Loftus (1986)
Assistant Professor of Marketing (1987)
B.S. Susquehanna University;
M.B.A. University of Scranton;
Ph.D. Cand., Syracuse University

Frank J. MacEntee, S.J., D. et U.* (1965)
Professor of Biology (1973)
B.S., Spring Hill College;
M.S., Ph.D., The Catholic University of America

Daniel Mahoney
Lecturer in Accounting (1984)
B.S., University of Scranton;
M.B.A., University of Scranton

Allen Marber (1985)
Associate Professor of Marketing (1985)
B.A., Michigan State University;
M.B.A., Baruch College;
Ph.D., New York University

Michael Marino, D. et U.* (1965)
Professor of Education (1970)
B.S., M.S., Brockport State College;
Ed.D., University of Buffalo

Dennis S. Martin (1985)
Associate Professor of
Math/Computer Science (1985)
B.S., Manhattan College;
M.A., University of Rochester;
M.S., Ed.D., SUNY at Buffalo

David E. Marx (1987)
Assistant Professor of Chemistry (1988)
B.S., East Stroudsburg University;
Ph.D., State University of New York at Binghampton

Sharon Matesi (1984-85; 1986)
Instructor in Nursing (1986)
B.S.N., University of Dubuque;
M.S.N., College Misericordia

Susan Fournier Mathews (1988)
Assistant Professor of Theology/Religious Studies (1988)
B.A., St. Anselm College;
M.A., Ph.D., The Catholic University of America

Gary E. Mattingly (1983)
Associate Professor of Physical Therapy (1988)
B.S., St. Ambrose College;
Ph.D., St. Louis University

Christine E. McDermott (1979)
Assistant Professor of Biology (1979)
B.A., California State at Fresno;
Ph.D., University of Tennessee

John W. McGinley (1970
Professor of Philosophy (1979)
A.B., College of the Holy Cross;
Ph.D., Boston College

Eugene A. McGinnis, D. et U.* (1948)
Professor of Physics/
Electronics Engineering (1963)
B.S., University of Scranton;
M.S., New York University;
Ph.D., Fordham University

Richard A. McGowan, S.J.** (1988)
Assistant Professor of Management (1988)
B.S., University of Pennsylvania;
M.S., University of Delaware;
M.A., Fordham University;
M. Dir., Th.M., Weston School of Theology;
D.B.A. Boston University

Frank McHale (1983)
Assistant Professor of Accounting (1985)
B.S., University of Scranton;
J.D., Catholic University of America

John M. McInerney, D. et U.* (1966)
Professor of English (1977)
A.B., LeMoyne College;
M.A., Ph.D., Loyola University, Chicago

Robert L. McKeage (1974)
Assistant Professor of Management (1978)
B.S., M.B.A., University of Scranton;
M.A., Lehigh University

Ronald H. McKinney, S.J. (1984)
Assistant Professor of Philosophy (1984)
B.A., University of Maryland;
M.Div., Th.M., Weston School of Theology;
M.A., Ph.D., Fordham University

John P. McLean, D. et U.* (1940)
Professor of Accounting
Alperin Chair of Management
(Gift of Joel M. Irwin and Myer Alperin)
B.S., University of Scranton

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University
**On Leave

Michael Opasu Mensah (1987)
Assistant Professor of Accounting (1987)
B.S., University of Ghana;
M.B.A., N.E., Louisiana University;
Ph.D., University of Houston

Louis D. Mitchell, D. et U.* (1961)
Professor of English (1972)
A.B., M.A., Fordham University;
Ph.D., New York University

J. Scott Mizes (1988)
Visiting Assistant Professor of Psychology (1988)
B.A., William Jewell College;
M.A., Ph.D., University of Arkansas, Fayetteville
Licensed Clinical Psychologist

Patrick Mohr, S.J. (1975)
Associate Professor of Philosophy (1981)
B.A., M.A., Spring Hill College;
Ph.D., Georgetown University

Marie Koval Nardone (1983)
Assistant Professor of Physical
Therapy (1983)
B.S., King's College;
M.S., Duke University

Georgia L. Narsavage (1984)
Assistant Professor of Nursing (1988)
B.S.N., University of Maryland;
M.S.N., College Misericordia

Jay Nathan C.P.I.M. (1983)
Associate Professor of Production Management
(1983)
B.S., M.S., University of Madras;
M.E., University of Florida;
M.B.A., M.A., Ph.D., University of Cincinnati

Jose Fernando Naveda (1988)
Assistant Professor of Mathematics/
Computer Science (1988)
B.S.D., Institute Technologica de Monterrey;
Ph.D., University of Minnesota

Hong V. Nguyen (1979)
Associate Professor of Economics (1985)
B.S., State University of New York
at Brockport;
M.A., Ph.D., State University
of New York at Binghamton

John C. Norcross (1985)
Associate Professor of Psychology (1988)
Chairperson, Department of Psychology (1987)
B.A., Rutgers University;
M.A., Ph.D., University of Rhode Island
Licensed Clinical Psychologist

Kevin M. Nordberg (1970)
Associate Professor of Philosophy (1980)
Chairperson, Department of Philosophy (1985)
A.B., Assumption College;
M.A., Ph.D., University of Notre Dame

Kevin R. Norris (1977)
Assistant Librarian II (1981)
B.S., M.L.S., University of Pittsburgh;
M.A., University of Scranton

John J. O'Malley, D. et U.* (1968)
Associate Professor of Psychology (1971)
B.S., University of Scranton;
M.S., Ph.D., Ohio University

William H. Osterle, D. et U.* (1956)
Professor of Theology (1974)
A.B., Loyola University of Chicago;
Ph.L., West Baden College;
M.S. in L.S., Western Reserve University;
S.T.B., Woodstock College;
M.A., University of Notre Dame

Walter A. Pachuk (1984)
Lecturer in Marketing
B.S., University of Connecticut;
M.B.A., University of Scranton

William J. Parente (1970)
Professor of Political Science (1973)
A.B., Xavier University;
Ph.D., Georgetown University

Robert A. Parsons (1979)
Associate Professor of
Foreign Languages (1985)
Chairperson, Department of
Foreign Languages (1988)
B.A., M.A., West Virginia University;
M.A., Ohio University;
Ph.D., Pennsylvania State University

Frederick W. Pearce (1982)
Assistant Professor of Communication (1982)
B.A., Iona College;
M.A., Ph.D. Cand., University of Pittsburgh

Georgia P. Pellino (1983)
Assistant Professor of Physical
Therapy (1987)
B.S., St. Louis University;
M.S., University of Kentucky

Paul M. Perdew (1985)
Associate Professor of Math/
Computer Science (1985)
B.A., Washington & Jefferson College;
M.A., University of Hawaii;
Ph.D., University of Idaho

Njegos Petrovic, D. et U.* (1967)
Professor of Foreign Languages (1974)
A.B., Classical College, Belgrade, Yugoslavia;
M.A., Ph.D., University of Montreal

Richard Plishka (1986)
Assistant Professor of Mathematics/
Computer Science (1986)
B.S., University of Scranton;
M.B.A., Syracuse University

Rose S. Prave (1988)
Assistant Professor of
Quantitative Management (1988)
B.S. Indiana University of Pennsylvania;
Ph.D. Cand., Pennsylvania State University

John B. Pryle (1967-1969; 1972)
Assistant Professor of Sociology (1972)
B.S., University of Scranton;
M.A., Fordham University;
Ph.D. Cand., The Catholic University
of America

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University
**On Leave

Tribhuan N. Puri (1986)
Assistant Professor of Finance (1986)
B. Tech., G.B. Pant University, India;
M. Tech., Indian Institute of Technology;
M.S., Ph.D., University of Tennessee

John J. Quinn, S.J., D. et U.* (1956)
Professor of English (1975)
A.B., College of the Holy Cross;
M.A., Fordham University;
S.T.B., Woodstock College;
Ph.D., University of London

Joseph L. Quinn, S.J. (1979)
Assistant Professor of English (1979)
A.B., Ph.L., A.M., Fordham University;
S.T.B., Woodstock College;
A.M., Ph.D., Harvard University

William V. Rakauskas, D. et U.* (1969)
Professor of English (1979)
B.S., M.A., University of Scranton;
Ed.D., Temple University

Donna D. Ramos (1974)
Assistant Librarian II (1978)
B.A., State University of New York
at New Paltz;
M.S.L.S., State
University of New York at Geneseo

Edward J. Rielly (1971)
Assistant Professor of Sociology (1971)
Chairperson, Department of Sociology/
Criminal Justice (1974)
A.B., Cathedral College;
M.A., St. John's University;
M.Ed., Ed.D., Columbia University

Dona Rinaldi (1985)
Assistant Professor of Nursing (1988)
B.S.N., College Misericordia;
M.S.N., Villanova University

John B. Robertson, Jr. (1969)
Assistant Professor of Physical
Education (1969)
B.S., Springfield College;
M.A., Trenton State College

John L. Rogers (1985)
Associate Professor of Fine Arts (1985)
Chairperson, Department of Fine Arts (1988)
B.A., Blackburn College;
M.A., M.F.A., Northern Illinois University

J.W. Roberts (1986)
Assistant Professor of English (1987)
B.A., M.A., University of Arkansas;
Ph.D., Kent State University

Robin A. Roth (1987)
Assistant Professor of Philosophy (1987)
B.A., M.A., California State University
at Long Beach;
Ph.D., De Paul University

Richard W. Rousseau, S.J. (1979)
Professor of Theology/Religious
Studies (1979)
Chairperson, Department of Theology/
Religious Studies (1981)
A.B., M.A., Boston College;
S.T.L., Facultes St. Albert de Louvain, Belgium;
S.T.D., St. Paul's University, Ottawa;
Ph.D., University of Ottawa

Midori Y. Rynn (1975)
Associate Professor of Sociology (1982)
B.A., Sophia University;
M.A.L.S., University of Michigan
M.A., Ph.D., Michigan State University

Thomas F. Sable, S.J. (1985)
Assistant Professor of Theology/
Religious Studies (1985)
B.A., Boston College
M.S., Georgetown University
M. Div., Jesuit School of Theology;
Ph.D., Graduate Theological Union

Robert P. Sadowski (1987)
Professor of Communication (1987)
Chairperson, Department of
Communication (1987)
B.A., Michigan State University;
M.S., Syracuse University
Ph.D., The University of Iowa

Husni Hasan Saleh** (1986)
Instructor in Mathematics/
Computer Science (1986)
B.S., M.S., Alegarh University;
M.S., Ohio University;
Ph.D., Ohio University

Carl Schaffer (1988)
Assistant Professor of English
B.A., Farleigh Dickinson University;
M.A., University of Michigan;
M.F.A., University of Iowa;
Ph.D. Cand., University of Denver

Elayne C. Scheck (1984)
Instructor in Nursing (1984)
B.S., M.S., Syracuse University

Thomas L. Scott, S.J. (1970)
Assistant Professor of History (1976)
B.A., M.A., St. Louis University;
Ph.D., University of Wisconsin

Varaz Shahmirian (1987)
Assistant Professor of Physics/EE (1987)
B.S., M.S., Michigan Technological
University;
Ph.D., Drexel University

Carole Sherlock (1987)
Lecturer in Quantitative Management (1987)
B.S., Marywood College;
M.A.T.M., Villanova University

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University
**On Leave

Larry R. Sherman (1981)
Assistant Professor of Chemistry (1981)
B.S., Lafayette College;
M.S., Utah State University;
Ph.D., University of Wyoming

Cheng Hwa Siao (1969)
Associate Librarian (1978)
LL.B., Soochow University;
M.A., Meiji University;
M.S. in L.S., Villanova University

James R. Sidbury (1983)
Associate Professor of Mathematics/
Computer Science (1983)
B.S., Duke University;
M.S., Ph.D., Auburn University

Ronald Sinzdak, D. et U.* (1962-65; 1970)
Associate Professor of Mathematics (1974)
B.S., King's College;
M.A., Fordham University;
Ph.D., University of Missouri

Shirleen Smith (1988)
Lecturer in Mathematics/
Computer Science (1988)
A.A., Mount Wachusett Community College
B.S., M.S., University of Arizona

Robert A. Spalletta (1983)
Assistant Professor of Physics/
Electronics Engineering (1983)
B.S., Stevens Institute of Technology
M.S., Ph.D., University of Rochester

E. Springs Steele (1979)
Associate Professor of
Theology/Religious Studies (1986)
B.A., M.A., Ph.D., University of Notre Dame

John C. Stevens (1987)
Assistant Professor of Mathematics/
Computer Science (1987)
B.A., Reed College;
A.M., Ph.D., University of Chicago;
M.S., Lehigh University

John K. Stout, D. et U.* (1966)
Professor of Human Services (1985)
B.S, M.S., D.Ed., Pennsylvania State University
Licensed Psychologist
Certified Rehabilitation Counselor

J. Michael Strong (1972)
Associate Professor of Physical
Education (1982)
B.S., Concord College;
M.S., West Chester State College;

Joseph A. Szuhay, D. et U.* (1964)
Professor of Human Resources (1974);
Chairperson, Department of Human Resources
(1974)
B.S., M.S., Ph.D., University of Iowa
Licensed Psychologist
Certified Rehabilitation Counselor

John T. Talamini (1977)
Associate Professor of Sociology (1981)
B.S., St. Joseph's College;
M.A., Fordham University;
Ph.D., Rutgers University

Charles E. Taylor, C.D.P. (1974)
Associate Professor of Computer
Science (1983)
B.S., M.B.A., West Virginia University

Timothy Terrell (1985)
Major, U.S. Army
Assistant Professor of
Military Science (1985)
B.A., Baylor University

Daniel S. Townsend (1987)
Assistant Professor of Biology (1987)
B.A., College of the Holy Cross;
M.S., Central Michigan University;
Ph.D., State University of New York at Albany

Susan Trussler (1985)
Assistant Professor of Economics (1987)
B.S., London School of Economics;
M.S., Pennsylvania State University;
Ph.D. Cand., Pennsylvania State University;

Arthur Van Gelder (1987)
Associate Professor of Physics/EE (1987)
B.S., University of Pennsylvania;
M.E.E., City College of New York;
Ph.D., City University of New York

Joe A. Vinson (1974)
Associate Professor of Chemistry (1978)
B.S., University of California, Berkeley;
M.S., Ph.D., Iowa State University

Carol Ann Wilkie Wallace (1981)
Assistant Professor of Communication (1982)
B.A., M.A., Wayne State University;
Ph.D., University of Iowa

Roger D. Wallace (1976)
Associate Professor of Communication (1981)
A.B., Butler University;
M.A., Bowling Green University;
Ph.D., University of Michigan

Edward F. Warner, D. et U.* (1964)
Professor of Communication (1980)
A.B., King's College;
M.S., University of Scranton

Joan M. Wasilewski (1988)
Instructor in Chemistry
B.S., King's College;
Ph.D. Cand., University of Pennsylvania

Rhonda B. Weller (1985)
Instructor in Nursing (1986)
B.S.N., Marywood College;
M.S.N., Catholic University of America;

Stephen E. Whittaker (1983)
Associate Professor of English (1988)
B.A., M.A., Ph.D., University of Texas

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University
**On Leave

David A. Wiley (1988)
Assistant Professor of Education (1988)
B.S., M.S., Ph.D., Temple University

Bernard D. Williams, D. et U.* (1962)
Professor of History (1976)
B.S., LaSalle College;
M.A., Niagara University

John C. Williams, D. et U.* (1964)
Professor of Reading (1982)
Director of Reading Clinic (1964)
B.S., Bloomsburg State College;
M.S., University of Scranton

Joseph P. Wilson (1985)
Assistant Professor of Foreign Languages and Literatures (1987)
B.A., University of Toledo;
Ph.D., University of Iowa

Gary N. Wodder (1974)
Director of Athletics (1974)
Assistant Professor of Physical Education (1974)
Chairperson, Department of Physical Education (1974)
B.S., M.A., Ph.D., Northwestern University

Charles Wolterink (1986)
Assistant Professor of Fine Arts (1986)
B.A., Michigan State University;
M.A., Ph.D., Stanford University

Francis J. Wormuth (1979)
Assistant Professor of Management
B.S., University of Scranton;
J.D., Duquesne University School of Law;
L.L.M., Boston University School of Law

Robert F. Young, S.J., D. et U.* (1965)
Associate Professor of Classics (1979)
A.B., Ph.L., M.A., St. Louis University;
S.T.L., Woodstock College

Joseph R. Zandarski, C.P.A., D. et U.* (1951)
Professor of Accounting (1971)
B.S., University of Scranton;
M.B.A., New York University
Ph.D., University of Pittsburgh

Dr. John Q. Feller (seated, left) and members of the University Fulbright Committee.

*The Pro Deo et Universitate Award for Twenty Years or more of Service to the University
**On Leave

AFFILIATED FACULTY

DIOCESAN FACULTY

Chair of Theology

Rev. John A. Bergamo, J.C.L.
Rev. Robert J. Barone, S.T.D.
Rev. Richard J. Gabuzda, S.T.D. Cand.

MEDICAL TECHNOLOGY FACULTY

PENNSYLVANIA

Abington Memorial Hospital
Abington, Pa.
Paul J. Cherney, M.D.
Barbara J. Scheelje, MT (ASCP)

The Allentown Hospital Assoc.
Allentown, Pa.
Proctor L. Child, M.D.
Beth Cepil, MT (ASCP), M.Ed.

Sacred Heart Hospital
Allentown, Pa.
Francis V. Kostelnik, M.D.
Sandy Neiman, MT (ASCP)

The Bryn Mawr Hospital
Bryn Mawr, Pa.
Harvey F. Watts, M.D.
Nancy Calder, MT (ASCP)

Geisinger Medical Center
Danville, Pa.
John J. Moran, M.D.
Alvin Swartzentruber, MT (ASCP)

Scranton Medical Technology Consortium
Scranton, Pa.
Thomas V. DiSilvio, M.D.
Mary Gene Butler, M.S., MT (ASCP)

Divine Providence Hospital
Williamsport, Pa.
Galal Ahmed, M.D.
Loretta Moffatt, MT (ASCP)

Nazareth Hospital
Philadelphia, Pa.
William J. Warren, M.D.
Diane Bejsiuk, MT (ASCP)

Wilkes-Barre General Hospital
Wilkes-Barre, Pa.
C. Warren Koehl, M.D.
Helen Ruane, MT (ASCP)

NEW JERSEY

Barnert Memorial Hospital Center
Paterson, N.J.
Jacob Churg, M.D.
Eleanor Kirlin, MT (ASCP)

St. Joseph's Hospital
Paterson, N.J.
Paul Steinlauf, M.D.
Helen B. Hill, M.Ed.
Valerie Coniglio, M.S., MT (ASCP)

St. Peter's General Hospital
New Brunswick, N.J.
Vincent A. Galdi, M.D.
Anthony D'Auria, M.S., MT (ASCP)

The Somerset Hospital
Somerville, N.J.
Eugene Fazzini, M.D.
Madeline Bonadies, M.S., MT (ASCP)

PHYSICAL THERAPY ADJUNCT FACULTY

Edwin S. Malloy
Professional Lecturer in Physical Therapy
B.S., University of Scranton
M.D., Loyola University of Chicago

Michael J. Aronica
Professional Lecturer in Physical Therapy
B.S., University of Scranton
M.D., Jefferson Medical College

Iris Ramos Lovallo, OTR
Lecturer in Physical Therapy
B.S., University of Puerto Rico

Maria Enid Soto, LPT
Lecturer in Physical Therapy
B.S., University of Puerto Rico

Felicita Srebro, LPT
Lecturer in Physical Therapy
B.S., University of Puerto Rico
M.S., University of Scranton

Mardi B. Steppacher, LPT
Lecturer in Physical Therapy
B.S., University of Vermont
M.S., University of Scranton

Paul J. Mackarey, LPT
Lecturer in Physical Therapy
B.S., Temple University
M.S., University of Scranton

Michael Murphy
Lecturer in Physical Therapy
B.S., Boston University
M.S., University of Kentucky

PHYSICAL THERAPY AFFILIATED CLINICAL FACULTY

Adult Services Unlimited, Inc.
Plains, Pa.
Arthur Savage, PT

Akron General Medical Center
Akron, OH
Pamala Galloway-Midgette, PT

Alamitos-Belmont Rehab Hospital
Long Beach, CA
Christopher E. Darby, PT

Alfred I. Dupont Institute
Wilmington, DE
Cheryl C. Valente, PT

Allegheny Valley Hospital
Natrona Heights, PA
Rick Eckert, PT

Allied Services for the Handicapped
Scranton, PA
Barbara Murphy, PT

Altoona Hospital
Altoona, PA
Judith O'Gurkis, PT

Arlington Hospital
Arlington, VA
Sandra Mori, PT

Ball Memorial Hospital
Muncie, IN
Mark A. Rader, PT

Barnes Kasson County Hospital
Susquehanna, PA
Barbara Frechen, PT

Bayfront Medical Center
St. Petersburg, FL
Roger Covey, PT

Bayley Seton Hospital
Staten Island, NY
Louis Ianuzzi, PT

Betty Bacharach Rehab Hospital
Pomona, NJ
Carol Ann McCulley, PT

Bloomsburg University of PA
Bloomsburg, PA
Arthur J. Hopkins, PT

Broome Developmental Services
Binghamton, NY
Martha Pilotti Gerty, PT

Bryn Mawr Rehab Hospital
Malvern, PA
Patricia Lengel, PT

Burlington County Memorial Hospital
Mt. Holly, NJ
Nancy Gilday, PT

Byers and Basciano PT & Rehab
Lancaster, PA
Judith H. Hickes, PT

Chambersburg Hospital
Chambersburg, PA
Sue Kampstra, PT

Chestnut Hill Hospital
Philadelphia, PA
Brigitte Gdovin, PT

Children's Hospital, Inc.
Baltimore, MD
Betsy Gough, PT

Children's Hospital, Inc./Sports PT
Baltimore, MD
Julie Copeland, PT

City Line Sports Rehab
Bala Cynwyd, PA
Robert Thourot, PT

Community General Hospital
Reading, PA
Jennie Reichert, PT

Community General Osteopathic Hospital
Harrisburg, PA
Debra Latsha, PT

Community Medical Center
Scranton, PA
Sondra L. Britt, PT

Crouse Irving Memorial Hospital
Syracuse, NY
John Kissel, PT

Delaware Valley Medical Center
Langhorne, PA
Barbara Moore, PT

Divine Providence Hospital
Williamsport, PA
Sr. Margaretann Guiton, PT

Doylestown Hospital
Doylestown, PA
Theresa McCarthy, PT

East Hills Rehab and Fitness Institute
Johnstown, PA
Michael B. Arnall, PT

Easter Seal Society/Allegheny County
Pittsburgh, PA
Gertrude G. McNamara, PT

Easter Seal Society/Berks County
Reading, PA
Ronna Z. Steigerwalt, PT

Easter Seal Society/Chester County
Coatesville, PA
Edith A. Madsen, PT

Easter Seals Rehab Center
Lancaster, PA
Carol Miller, PT

Easton Hospital
Easton, PA
Kathleen M. Vallarta-Shorter, PT

Emanuel Hospital & Rehab Center
Portland, OR
Denise McCoy, PT

Fitzgerald Mercy Medical Center
Darby, PA
Joan Mamola, PT

Francis Scott Key Medical Center
Baltimore, MD
Linda Paferi, PT

Freehold Area Hospital
Freehold, NJ
Alvin R. Goldman, PT

Geisinger Medical Center
Danville, PA
Deborah J. Long, PT

Geisinger/Wyoming Valley Medical Center
Wilkes-Barre, PA
Cynthia A. Gaffney, PT

Gnaden Huetten Memorial Hospital
Lehighton, PA
Del Rey McArdle, PT

Good Samaritan of Pottsville
Pottsville, PA
Barbara Sholtis, PT

Good Shepard Rehab Hospital
Allentown, PA
Anne Hannon, PT

Great Lakes Rehabilitation Hospital
Erie, PA
Suzanne Henderson, PT

Hahnemann University Hospital
Philadelphia, PA
Michelle Perry, PT

Handicapped Children's Assoc.
Johnson City, NY
Kathleen Kane, PT

Head Injury Recovery Center/Hillcrest
Milford, PA
Christine Ficken, PT

Holy Redeemer Hospital
Meadowbrook, PA
Marguerite Donahue, PT

Holy Redeemer Sports Medicine Center
Meadowbrook, PA
Robert Filer, PT

Holy Spirit Hospital
Camp Hill, PA
Patricia Dye, PT

Horton Memorial Hospital
Middletown, NY
Neil Newman, PT

Hunterdon Medical Center
Flemington, NJ
Pat Kitchin, PT

Indiana Hospital
Indiana, PA
Mary E. Ryen, PT

Jeanes Hospital
Philadelphia, PA
Marianne Mesure, PT

Jersey Shore Hospital
Jersey Shore, PA
Karen Johnson, PT

Jersey Shore Medical Center
Neptune, NJ
Georgina Ryan-LaMarche, PT

Jewish Hospital
St. Louis, MO
Elizabeth A. Slama, PT

John Heinz Institute of Rehab
Wilkes-Barre, PA
Lori D. Duncan, PT

John Sealy Hospital/UTMB
Galveston, TX
Janet Pfau, PT

John T. Mather Memorial Hospital
Long Island, NY
Donna Radzik, PT

Johns Hopkins Hospital
Baltimore, MD
Carol Woodward, PT
Sandra Chambers, PT

Kapiolani Women's & Children's Med. Cntr.
Honolulu, HI
Kathy Ratliffe, PT

Kessler Institute for Rehab, Inc.
West Orange, NJ
Elaine Lampmann, PT

Lake Erie Institute of Rehab (LEIR)
Erie, PA
Julie Postway, PT

Lancaster General
Lancaster, PA
Kim Bond, PT

Lankenau Hospital
Philadelphia, PA
Stan Dacko, PT

Lehigh Valley Hospital
Allentown, PA
Sharon Hix, PT

Lewistown Hospital
Lewistown, PA
Randall Lee Shelley, PT

Lower Bucks Hospital
Bristol, PA
Kathleen T. Keeler, PT

Martin, McGough and Eddy
Leesport, PA
Pamela Unger, PT
Debra Reich Lyons, PT

Med. Center One, Inc.
Bismarck, ND
Terry Thunshelle, PT

Medical Center at Princeton
Princeton, NJ
Lynne M. Harwood, PT

Medical University of South Carolina
Charleston, SC
Erica Rouvalis, PT

Memorial Hospital
York, PA
Mary Pantano, PT

Mercy Hospital
Altoona, PA
Paul Tryninewski, PT

Mercy Hospital
Pittsburgh, PA
Stephen W. Bannister, PT

Mercy Hospital
Scranton, PA
Carol Pacifico, PT

Mercy Hospital
Wilkes-Barre, PA
Suellen Burkhardt, PT

Mercy Hospital of Johnstown
Johnstown, PA
Madeline F. Gyure, PT

Mercy Medical Center
Denver, CO
Karen Valenti, PT

Milford Memorial Hospital
Milford, DE
Patrick A. McKenzie, PT

Montefiore Hospital
Pittsburgh, PA
Amy R. Cribbs, PT

Morton F. Plant Hospital
Clearwater, FL
Carolyn Rickrode, PT

Moses Taylor Hospital
Scranton, PA
Linda Snyder, PT

Nesbitt Memorial Hospital
Kingston, PA
Lan T. Herrick, PT

Neshaminy Manor Home
Doyelstown, PA
Brigid Gallagher, PT

New Hanover Memorial Hospital
Wilmington, NC
Ellen C. James, PT

Newton Memorial Hospital
Newton, NJ
Lawrence W. Raymond, PT

North Arundel Hospital
Glen Burnie, MD
Sharon Steube O'Neill, PT

North Carolina Memorial Hospital
Chapel Hill, NC
Barbara Skinner, PT

North East Ohio Sports Medicine Inst.
Akron, OH
Thomas E. Dawson, PT

NYU/Institute of Rehab. Medicine/Rusk
New York, NY
Beverly DeVine, PT

Office of Joan Faulkner
Wallingford, CT
Janet Swanson, PT

Oregon Health Sciences University Hospital
Portland, OR
Ruth Ann Hurst, PT

Our Lady of Lourdes Memorial Hospital
Binghamton, NY
Rebecca Hudick, PT

Overlook Hospital
Summit, NJ
Nancy Eggleston, PA

Phelps County Regional Medical Center
Rolla, MO
Christie Stockton, PT

Pocono Hospital
East Stroudsburg, PA
Lawrence Hochreiter, PT

Pocono/Slate Belt Rehab
Bartonsville, PA
Steven R. Lazicki, PT

Polyclinic Medical Center
Harrisburg, PA
Barbara L. Henry, PT

Pottsville Hospital and Warne Clinic
Pottsville, PA
Kathleen M. Schuettler, PT

Presbyterian University Hospital
Pittsburgh, PA
Raymond W. Bauder, PT

Rehab Hospital for Special Services
Mechanicsburg, PA
Margaret Burlew, PT

Rehab Hospital for Special Services
York, PA
Catherine Pedersen, PT

Rehab Hospital of Nitanny Valley
Bellefonte, PA
Ann L. Keefer, PT

Rehab Services, Inc.
Brockton, MA
James Stevens, PT

Ridley Sports Rehabilitation, Inc.
Ridley Park, PA
J. Matthew Hanling, PT

Riverview Medical Center
Red Bank, NJ
Cindy McKibben, PT

RK Physical/Respiratory Therapy, Inc.
Ferndale, NY
Robert L. Konvalin, PT

Robert Packer Hospital
Sayre, PA
Raymond J. Tippett, PT

Sacred Heart Hospital
Allentown, PA
Joanne D. Miller, PT

Sacred Heart Hospital and Rehab Center
Norristown, PA
Karen Fesmire, PT

Saint Agnes Medical Center
Philadelphia, PA
Michael Saben, PT

Saint Francis Hospital
Pittsburgh, PA
Merry Hildebrand, PT

Saint Joseph's Center
Scranton, PA
Juan Rosario, PT

Saint Joseph's Hospital
Reading, PA
Lisa Smola, PT

Saint Joseph's Hospital & Health Center
Syracuse, NY
Jane Dingman, PT

Saint Lawrence Rehab Center
Lawrenceville, NJ
Kathleen Quimby, PT

Saint Luke's Hospital
Bethlehem, PA
Nancy Gorkos, PT

Saint Peter's Hospital & Rehab Center
Albany, NY
Steven Adams, PT

Saint Vincent's Health Center
Erie, PA
Deborah Rae Sisinni, PT

Saint Vincent's Medical Center
Staten Island, NY
Katherine McGarry, PT

Scranton Rehabilitation Services
Scranton, PA
Paul J. Mackarey, PT

Seaview Hospital
Staten Island, NY
Mona Elias, PT

Somerset Medical Center
Somerville, NJ
Ellen Zambo Anderson, PT

South Hills Sports Medicine Clinic
Pittsburgh, PA
William P. Rogers, PT, ATC

Sports Medicine Resource, PC
Stony Brook, NY
Rebecca Harris, PT

Sports Physical Therapists, Inc.
Broomall, PA
Annamaria Falcone, PT

SPRINT
Scranton, PA
Marybeth Adams, PT

Staten Island Hospital
Staten Island, NY
Mary DeVita, PT

Sullivan Diagnostic Treatment Center
Harris, NY
David Marks, PT

Syracuse Developmental Center
Syracuse, NY
Bernadine M. Butcher, PT

Twin Tiers Rehab Center/St. Joseph's Hospital
Elmira, NY
Nancy Shepard, PT

UHS/Binghamton General Hospital
Binghamton, NY
Linda Knapp, PT

UHS/Wilson Memorial Hospital
Johnson City, NY
Patricia Sickles, PT

Underwood Memorial Hospital
Woodbury, NJ
Peggy Soucek, PT

Union Hospital
Union, NJ
Dorothy Breynock, PT

United Cerebral Palsy of Greater Suffolk
Commack, NY
Faye Penn, PT

United Cerebral Palsy of N.E. PA
Clarks Summit, PA
Bobbi M. Simmons, PT

United Cerebral Palsy of Nassau County
Roosevelt, NY
Diane Foster, PT

University of Michigan Medical Center
Ann Arbor, MI
Paulette M. Cebulski, PT, Ph.D.

VA Medical Center
Wilkes-Barre, PA
Martin Stopper, PT

Visiting Nurse Association
Easton, PA
Mary Marsden, PT

VNA/Home Health Maintenance Organization
Scranton, PA
Sylvia P. Schaffer, PT

Wayne County Memorial Hospital
Honesdale, PA
Laurie Callahan, PT

Welkind Rehab Hospital
Chester, NJ
Judy Semon, PT

Wilkes-Barre General Hospital
Wilkes-Barre, PA
Paige Hippensteel, PT

Williamsport Hospital & Medical Center
Williamsport, PA
Melinda L. Sechrist, PT

Womack Army Hospital
Fort Bragg, NC
Major Catherine Neveaux, PT

Wyoming Valley Children's Association
Wilkes-Barre, PA
Michael Markwith, PT

ADJUNCT FACULTY

Michele Ackerman
Languages
B.A., M.A., Universite de Paris X Nanterre

Rev. Robert J. Barone
Theology
A.B., St. Mary's College;
S.T.B., St. Mary's Seminary;
S.T.L., S.T.D., University of St. Thomas Aquinas, Rome

Sid Benjamin
Journalism
B.A., Pennsylvania State University
Columnist, Sunday *Times*
Retired editor, Sunday Magazine
Scranton *Times*

Rev. John A. Bergamo
Theology
A.B., Mount St. Mary's College;
J.C.L., Gregorian University, Rome

Robert Bergman
History
B.S., M.A., University of Scranton

Ann Marie Bush
English
A.B., Blackburn College;
M.A., University of Scranton
Doctoral Studies, New York University

Susan Butler
English
B.A., Stonehill College;
M.A., University of Scranton

Vincent Byrne
Economics/Finance
B.S., University of Scranton
M.S., University of Scranton

Jean Campbell
Oral Communication
A.B., University of Scranton

Thomas Corrigan
Economics/Finance
A.B., St. Peter's College

Michael M. Costello
Advertising, Public Relations
B.S., M.B.A., University of Scranton;
M.A., Ohio University

James A. Doherty
Business Law
B.S., Holy Cross;
J.D., Georgetown University School of Law

Allen J. Duricko
Psychology
B.S., University of Scranton;
Ph.D., Arizona State University
Licensed Clinical Psychologist

Joseph X. Flannery
Journalism
B.S., University of Scranton
Reporter-Columnist
Scranton *Times*

Lisa Row Fraustino
English
B.A., University of Maine at Orono;
M.A., University of Scranton

Janice Marie Gable
English
B.A., Penn State University;
M.A., University of Scranton

Rev. Richard J. Gabuzda
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(1) Fitzpatrick Field
(2) Jefferson Hall
(3) O'Hara Hall
(4) The Gallery
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(7) Greenhouse
(8) Scranton Hall
(9) The Estate
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(11) Loyola Hall of Science
(12) St. Thomas Hall
(13) Galvin Terrance
(14) Gunster Student Activities Center
(15) John J. Long Center
(16) Maintenance Building
(17) Hill House
(18) Claver Hall
(19) Hopkins House
(20) Byron Recreation Complex
(21) Campion Hall
(22) Elm Park Annex
(23) Houlihan-McLean Center
(24) Smurfit Arts Center
(25) Center for Eastern Christian Studies
(26) Hyland Hall
(27) US-BAC (415 N. Washington Ave.)
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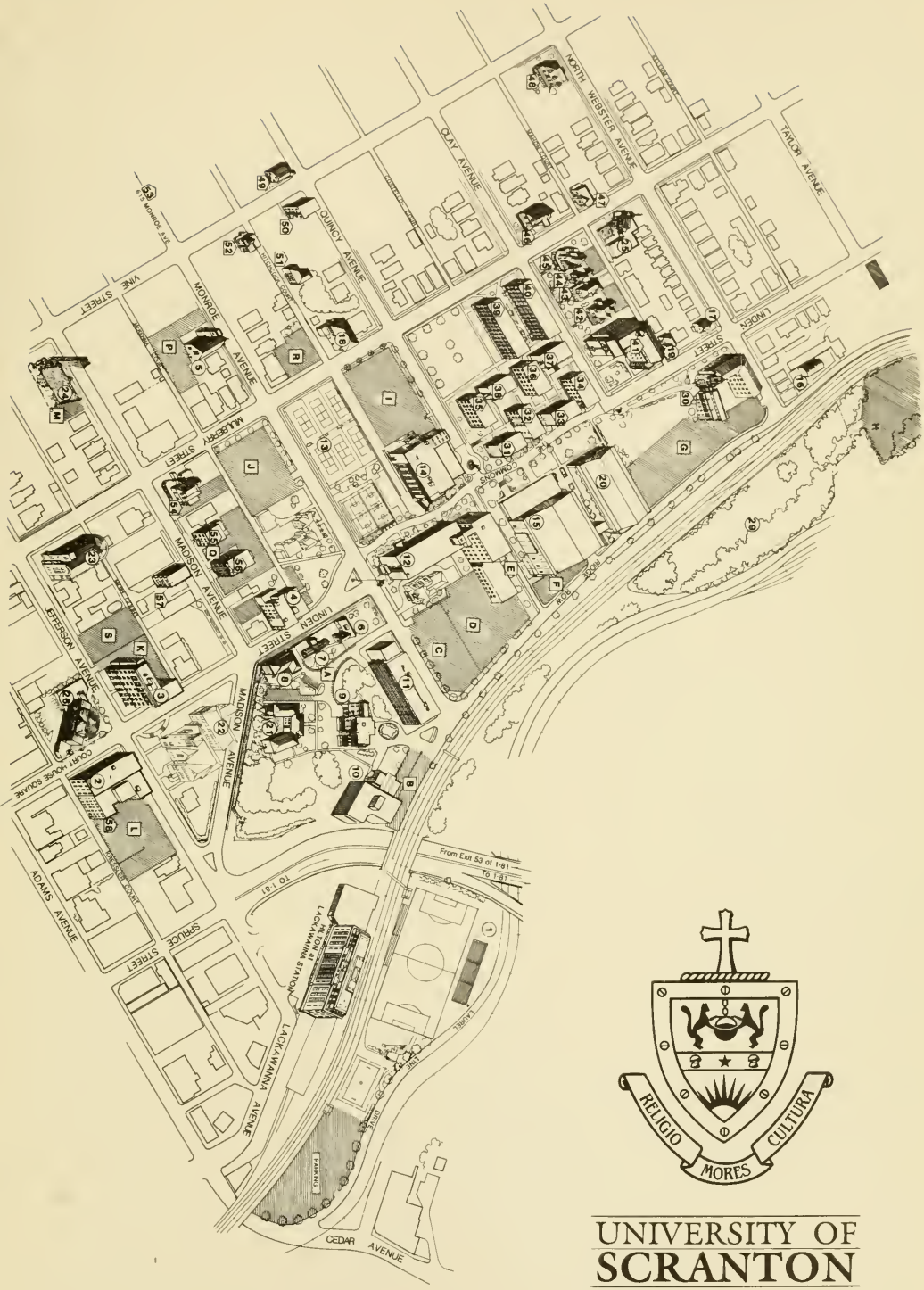

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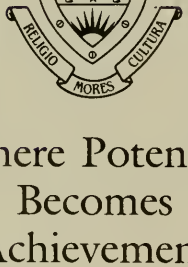

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